

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1008—Vol. XXIV.]

LONDON, SATURDAY, DECEMBER 16, 1854.

[PRICE 6d.]

MR. JAMES CROFTS, MINING BROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, TRANSACTS BUSINESS
IN DIVIDEND MINES, well selected, are the best of any known investments—paying
from 15 to 20 per cent. per annum in dividends. The choice of NON-DIVIDEND
MINES for speculation requires careful discrimination. Mr. Crofts transacts every description of business connected with the STOCK
EXCHANGE at the same rates of commission as charged by the brokers of that estab-
lishment.—BANKERS: The Commercial Bank of London.

MR. JAMES LANE, No. 33, THREADNEEDLE STREET,
LONDON, continues to DEAL in all the LEADING MINES, and is desirous
of PURCHASING Sortridge Consols, Hingston Down, Devon Great Consols, Bedford
United, Molland, &c.

MR. J. B. BRENCHLEY TRANSACTS BUSINESS IN MINING
BUYERS, as many shares, both in dividend and non-dividend mines, may be pur-
chased at prices which leave a considerable margin for improvement.
ON SALE, amongst others paying dividends:—
10 South Tamar 14 Trevelyan 10 Trethane
5 Bedford 15 Trevelyan 14 Hingston Down 1 Buller

5 Bryntail 6 Cili and Went 100 Molland 25 Wheal Wrey
25 Boringdon 50 Great Baddern 40 North Tamar 25 Wheal Pollard
50 Cas Gynon 50 Great Hago 5 North Robert 50 Wheal Crebor
40 Caber 6 Gonnans 100 North Hingston 45 Wheal Crebor
75 Cwm Darren 100 Oola 50 Great Sortridge
25 East Frongoch 100 Trevelyan 50 North Tamar 10 Bell and Lanarth
3 Great Alfred 50 Trevelyan 100 West Sort. Cons.
And will BUY South Tamar, Molland, and Trevelyan.
Mining Offices, 2, Pinner's-court, Old Broad-street.

MR. W. LEMON OLIVER, STOCK AND SHAREBROKER,
33, THREADNEEDLE STREET
Business transacted in every description of British and Foreign Mines.
(Sworn Broker.)

ENGLISH AND FOREIGN STOCK, SHARE, AND MINING
OFFICES, No. 2, OLD BROAD STREET, LONDON.
MR. HENRY SIBLEY (late Mr. Peter Watson) will at all times give the best in-
formation; and also BUY and SELL SHARES on the usual commission.

MESSRS. POWELL AND COOKE, MINING AGENTS,
1, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. E. GOMPERS, MINING SHARE DEALER,
96, GRACECHURCH STREET, LONDON.

MR. MICHAEL WILLIAMS BAWDEN, MINE SHARE
BROKER AND GENERAL ASSAY MASTER, LISKEARD.

MR. FRANCIS RIDGMAN, MINE SHAREBROKER,
TAVISTOCK, DEVON.

MR. NEWTON SAMUELSON, F.C.S., ASSAYER AND ANALYTICAL
CHEMIST, 3, HACKIN'S KEY, LIVERPOOL.

MR. RICHARD MICHELL'S MINING AND GENERAL
COMMISSION AGENCY OFFICES.
Mines inspected, and information punctually furnished.

MR. W. T. RICKARD, F.C.S., ANALYTICAL CHEMIST,
Assayer of Copper and the Precious Metals, by Special Appointment of
the Chilian Government.
ACORN VILLA, FORD ROAD, OLD FORD, LONDON.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER,
No. 1, BRIDGE STREET, BATH, is a BUYER of Wheal Zinn, West Poi-
terro, Alfred Consols, Castle Dinas, Wheal Gill, Green Alfred, and Tamar.
N.B. No notice taken of anything but positive offers.

MR. TYACK, MINE BROKER, CAMBORNE, from his situation
in the best mining district in the county, together with his daily opportunities
of increased experience, is well adapted to GIVE ADVICE to CAPITALISTS disposed
to invest in MINING; considering the present time, a good and favourable oppor-
tunity to invest. Mines inspected by the most experienced agents.

MR. R. LAMBERT TENDERS HIS SERVICES TO PARTIES
INVESTING IN OR SELLING MINING PROPERTY. By the soundness of
the information to which he has access, and the long and character of the under-
takings to which he directs attention, his constant endeavours are to secure the suc-
cess of his clients.—Offices, 3, Hatton-court, Threadneedle-street, City.

JAMES F. BODDY, 48, THREADNEEDLE STREET, LONDON,
begs to call the attention of the public to the present DEPRESSED STATE of
the MINING MARKET, for INVESTING THEIR CAPITAL in good, sound, MINING
PROPERTY, paying regularly from 12 to 20 per cent. on outlay. No other invest-
ments afford so great advantages as judiciously selected mining stock.
J. F. Boddy will recommend more progressive mines of great promise, but care
should be taken in the selection of the same. Every information will be forwarded
on application; likewise a list, and prices of the best dividend and progressive mines,
free of charge.—Dec. 9, 1854.

TREGUNE MINE.—ONE HUNDRED SHARES in this most
promising MINE FOR SALE, on advantageous terms, for immediate CASH.
Apply to JAMES F. BODDY, 48, Threadneedle-street, London.

MINES.—MR. GEORGE SPATLEY begs to RECOMMEND
parties seeking profitable investments to make a SELECTION from the fol-
lowing, being convinced that they will prove advantageous at present prices:
Wheal Butler, Cili and Went (St. Agnes), Cili and Wentworth.
Nant-ar-Nelle, Bittow Castle, Llaner, San Fernando.
Boscom, North Basset, Sortridge.
Wood, East Caradon.
List of prices, and full particulars of each, together with the value of all shares,
will be forwarded on application.—2, Winchester-buildings, London.

MR. HY. GOULD SHARP HAS FOR SALE, OR ANY PART,
10 Trethane, 100 North Sortridge, 100 Trenew Consols.
10 Sortridge and Bedford, 50 Great Sortridge, 60 Molland.
15 Trevelyan, 50 Great Sortridge, 20 Molland United.
40 Wood, 40 Cubert, 20 Molland United.
50 Tamar Maria, 10 Sortridge Consols, 100 North Hingston.
Mining shares of every description bought and sold.
Crosby Hall Chambers, Bishopsgate-street, London.

MR. CAREY, MINING AGENT, TRANSACTS BUSINESS IN
BRITISH AND FOREIGN MINES, in INSURANCE, BANKING, and RAIL-
WAY SHARES, at the lowest prices of the day.
MR. CAREY has FOR SALE SHARES in DIVIDEND-PAYING MINES, which
bought at present low prices, will pay from 20 to 30 per cent. And SHARES in good
PROGRESSIVE MINES, with their machinery complete, and raising ores:—Hing-
ston Down, North Down, St. Day United, East Caradon, Cayan, Tamar, Sortridge
Consols, Cley Bay, Molland, Combarthin, East Wheal Vor, Dalecarlia, &c.
6, Moorgate-street, City, Dec. 15, 1854.

BOTALLACK TIN AND COPPER MINES.—MR. W. CHARLES
HAS SHARES FOR SALE in the above important MINES, which are now
paying £10 per share every two months. W. CHARLES HAS SHARES FOR SALE also
in the following:—Great Consols, West Far Consols, East Caradon, Cayan,
Kewick, Llaner, and Boring, Alford Clay, Warren State, North Trevelyan, and
others. Mr. W. CHARLES is a BUYER in West Caradon, Mole Valley, Union Tin,
and others.—27, Abchurch-lane, Dec. 15, 1854.

MINING INVESTMENT.—T. FULLER AND CO., 51, THREAD-
NEEDLE STREET, LONDON, beg to call attention to the favourable opor-
tunity of INVESTING IN BRITISH MINES, particularly in those dividing their
profits every two or three months, which average from 15 to 20 per cent.; with every
prospect of continuance, and being free from fluctuation, such as Consols, railways,
and other securities; and respectfully direct attention to the PURCHASE of SHARES
in many PROGRESSIVE MINES, being in full operation, with efficient machinery,
and for the development and bringing the same into a profitable state of working,
which, at present prices, cannot fail to remunerate all who invest; a careful selection
of such alone can be obtained by a daily communication with agents of high standing
and practical experience of the principal mines in Devon, Cornwall, and Wales.
T. FULLER and Co. will furnish every information to capitalists, either personally
or by letter, and can effect purchases or sales of every description.

MINING INVESTMENT.—MR. CHARLES GURNEY, No. 4,
CORBET COURT, GRACECHURCH STREET, LONDON, will be happy
to PURCHASE or SELL SHARES, on the usual commission, in all DIVIDEND
MINES, now paying from 15 to 20 per cent.; or in those working under prospects
of early dividends.—FOREIGN LANGUAGES TRANSLATED, and the PROCEED-
INGS at PUBLIC MEETINGS REPORTED, on moderate terms.

MR. JAMES HERRON HAS FOR SALE, OR ANY PART, the
following SHARES, at LOWER PRICES than have hitherto been quoted:—
30 Boringdon 20 Tamar Consols 30 Wheal Golden 10 South Tamar
25 Boringdon Cons. 20 Kilbricken 20 Pemb. & Crinnis 30 Worthing
20 Bryntail 5 Wheal Uny 30 North Towy 30 Trevelyan
30 Wheal Crebor 20 Great Toward 30 Vale of Towy 20 Wheal Arthur
30 Wye Gwynne 2 West Toward 2 East Basset 20 Wheal Edward
30 Cwm Darren 20 Thomas's United 10 Lewis 100 Exm. and Adams
50 East Frongoch 30 Cubert 20 Merilyn 20 Gilmar
30 Great Wh. Hugo 30 Harriett 30 Alfred Consols 20 North Buller
50 Kilbrine 30 St. Day United 5 Great Alfred 5 Wheal Robert
30 Molland 30 Wheal Greenville 3 West Providence 3 Trubane
30 Nant. & Penrh. 3 Craddock Moor 10 Hingston Down 5 Trev. & Barrier
30 Treleigh 1 Gramb. & St. Aub. 1 Trevelyan 10 Santiago
30 North Down 3 Wheal Comfort 3 Trevelyan
A correct price of the above will be forwarded on application.

Mr. HERRON is a BUYER of 20 St. John del Key, 20 Colbre, 3 Great Alfred Consols,
2 South Caradon, 1 South France, 1 United Mine, 1 Mary Ann, 10 North Basset,
1 Trumpet Consols, 1 South Basset, 1 Wheal Buller, 10 Bedford Consols, 2 East Dar-
ren, 3 Halamanning, 10 Par Consols, 1 Wheal Margaret.
33, Clements-lane, Lombard-street.

MR. JOSEPH JAMES REYNOLDS, STOCK AND SHARE
BROKER, No. 21, THREADNEEDLE STREET, LONDON.
BUSINESS TRANSACTED in every description of BRITISH and FOREIGN
STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

MR. EVAN HOPKINS, C.E., CONSULTING MINING
ENGINEER.—MR. HOPKINS may be CONSULTED DAILY by gentlemen
and capitalists who have invested, or may wish to invest their capital in MINES
or MINERAL PROPERTIES, on all matters connected therewith—home and for-
eign. Also, in every description of METALS, MINERALS, ROCKS, and their com-
mercial value—NEW PATENTS, &c., so as to make a judicious selection and avoid
questionable schemes.
Mr. Hopkins requests his ANNUAL CLIENTS to SEND him their PRESENT
ADDRESS, and a list of the shares, &c., they now hold.
Mr. Hopkins is now prepared to receive prospectuses and reports on new under-
takings, to give his opinion thereon, and to take an interest and an active part in the
London management of any of the legitimate speculations he may recommend to his
clients.—38, Thirloe-square, Brumpton.

MR. JOHN H. CLEMENT begs to OFFER HIS SERVICES as
CONSULTING MINING ENGINEER to gentlemen and capitalists holding,
or wishing to hold, interests in mines or mineral properties in any part of the world.
Mr. CLEMENT, having had a life-long experience in these matters in various parts
of the globe, considers that he will be enabled to give the most careful advice, as to
how and when to invest in mining property.
Address, 10, Gloucester-street, Camden-hill, Kensington.

CAPT. THOMAS DUNN, OF TAVISTOCK, undertakes to INSPECT,
REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND,
IRELAND, SCOTLAND, or WALES. No objection to take the management
of any mine or mines in the neighbourhood of Tavistock.

MR. P. CADELL, Jun., may be CONSULTED on the subject of
UNDERSTAKINGS connected with GOLD-MINING, including WATER
COMPANIES, furnishing power and water at a distance from the permanent water-
courses, which are at present the most productive source for investment in California.
Address, Quinaburg, Mariposa County, California, Oct. 16, 1854.

RAILWAYS AND MINES.—To Capitalists seeking investments it
may be observed that the market prices of the day are governed more by the
operations of speculators and the immediate abundance or scarcity of stock, than by
any reference to the intrinsic worth of the property. Railways depend upon the
paid-up capital, loan, traffic, and expenditure accounts; the probabilities of competi-
tion or alliance with neighbouring companies, the creation of new capital, and other
circumstances to which those only can have access who give constant attention to the
subject. Mines, on the contrary, are exempt from the vicissitudes of competition.
Shares in the safest English dividend mines, pay at the rate of £15 to £25 per cent.
per annum on the amount invested, without risk or liability. All the best mines are
free from debt, and pay dividends regularly every two months. There are some
very promising mines, in the most prosperous districts, fast approaching to a di-
vidend-paying state, which will doubtless, in a short time, command prices far beyond
their present market value. Judiciously selected, there are no securities which, with
so much perfect safety, offer so wide a field for profit as English copper, tin, and lead
mines. Every information afforded to capitalists seeking investments, or desirous of
exchanging their securities, and sales or purchases effected upon the best possible terms.
JAMES S. TRIPP and CO., 38, Clements-lane, Lombard-street, London.
Established 1839.

COBALT AND NICKEL.—ALFRED SENIOR MERRY,
REFINER AND PURCHASER OF COBALT AND NICKEL ORES,
ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM.

NICKEL AND COBALT REFINING, AND GERMAN SILVER
WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN
BARKER begs to inform the Trade that he has the following articles for sale:—
REFINED METALLIC NICKEL. OXIDE OF COBALT. WIRE, &c.
REFINED METALLIC NICKEL. GERMAN SILVER IN INGOTS, SHEET,
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL COBALT, NICKEL, COLOUR, AND
CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

IBOTSON BROTHERS AND CO., SHEFFIELD, STEEL AND
FILE WORKS; also COMMISSION MERCHANTS for the SALE and PUR-
CHASE of every description of MACHINES and MACHINERY, and every article
used by engineers, too numerous to enumerate in an advertisement.

MR. THOMAS EDINGTON (late Senior Partner of the Phoenix
Ironworks, Glasgow), IRON MERCHANT, CONTRACTOR, AGENT for
PATENTS, GENERAL COMMISSION AGENT, INSPECTOR OF RAILWAY BARS
AND CASTINGS, 17, GORDON STREET, GLASGOW.
AGENT, on COMMISSION, for the PURCHASE of Scotch Pig-Iron, Railway
Bars, Bar-Iron, Castings; and for the SALE of English Boiler and Ship Plates, Bar-
Iron, Angle and Rivet Iron, Anchors, Tinned Plates, Chains, Nails, Steel, &c.

GREAT CRINNIS COPPER MINE, ST. AUSTELL.—A
NUMBER OF TRIBUTERS are REQUIRED in this MINE, to work silver-
lead ores.—Apply immediately to Mr. SHAW, at the mine.
26, Austinfriars. By order, R. C. MANUEL, Sec.

TAMAR SILVER-LEAD MINING COMPANY.—The REPORT
of the COMMITTEE OF INVESTIGATION may be OBTAINED, on applica-
tion, by shareholders, between the hours of Eleven and Four, at the office of A. L.
BELLINGHAM, Esq., 1, St. Michael's-alley, Cornhill.

GREAT WHEAL VOR UNITED MINES.—Notice is hereby given,
that the HALF-YEARLY GENERAL MEETING of adventurers in the above
mines will be HELD at the London Tavern, Bishopsgate-street, on Wednesday,
the 20th inst., at Two o'clock precisely.
R. T. ALISON, Sec.
17, Gracechurch-street, London, Dec. 5, 1854.

WHEAL SAMSON.—Notice is hereby given, that a GENERAL
MEETING of the shareholders of this mine will be HELD at the office of
the company, No. 17, Cornhill, on Wednesday, the 20th day of December, at Twelve
o'clock precisely.

ROYAL SANTIAGO MINING COMPANY.—The Directors hereby
give notice, that the HALF-YEARLY GENERAL MEETING of the share-
holders will be HELD at the office of the company on Wednesday, the 30th of January
next, at One o'clock precisely, when the directors will make their report.
38, Broad-street-buildings, Dec. 15, 1854.

MEXICAN AND SOUTH AMERICAN COMPANY.—A HALF-
YEARLY MEETING of the proprietors of shares in this company will be
HELD at the London Tavern on Thursday, the 21st inst., at Two o'clock precisely,
when a statement will be submitted to the shareholders by the directors relative to
the affairs, in conformity with the regulations of the company.
17, Gracechurch-street, Dec. 5, 1854. GEORGE COPPARD, Sec.

THE NORTH BRITISH AUSTRALIAN COMPANY.—A HALF-
YEARLY MEETING of the proprietors of shares in this company will be HELD at the London
Tavern, Bishopsgate-street, London, on Friday, the 29th day of December inst., at
One o'clock in the afternoon, for the Election of the Committee of Management for
the ensuing year.
And notice is hereby further given, that at this meeting a motion, or series of re-
solutions, for making certain alterations in the Contract of Copartnership of the com-
pany, will be made and laid upon the table, to be sanctioned at a subsequent Special
General Meeting, in terms of the said Contract.
By order of the Committee, JOHN TAYLOR AND SONS, Managers.
6, Queen-street-place, Thames-street, London, Dec. 15, 1854.

GEORGE MOORE HAS FOR SALE the following SHARES,
or ANY PART, at LOWER PRICES than have hitherto been quoted:—
50 Boringdon Consols, 100 Great Wheal Hugo, 100 Silver Brook.
200 Bedford and Sortridge, 25 Great Baddern, 100 Oola.
25 Bryntail, 100 Kilbrine, 20 Orreid.
10 Balfour, 100 Molland, 50 Tavy Consols.
20 Crebor, 10 Millpool, 20 Trevelyan.
100 Cas Gynon, 100 North Sortridge, 50 West Sortridge.
50 Cwm Darren, 10 North Trevelyan, 5 Wheal Uny.
50 East Wheal Vor, 5 North Robert, 50 Wheal Russell.
50 East Frongoch, 20 Sortridge, 20 Wheal Zinn.
100 Great Sortridge.
A correct price of any of the above shares will be forwarded on application.
32, Nicholas-lane, Lombard-street. (Sworn Broker.)

£25,000.—THE SWANSEA HARBOUR TRUSTEES are pre-
pared to receive TENDERS for the LOAN of TWENTY-
FIVE THOUSAND POUNDS, on MORTGAGE of the RATES and TOLLS autho-
rised to be demanded and levied under the provisions of the Swansea Harbour Act,
1854, in sums of not less than £100. Interest 5 per cent., payable half-yearly. Term
seven years.—For further particulars, apply to Mr. LEWIS THOMAS, solicitor, Swansea.

TO CAPITALISTS.—WANTED, by a PATENTEE, a PARTY
commanding £2000 to £3000, to JOIN him to CARRY OUT his INVENTION,
which has been tested on a large scale, and which will return very large profits.
Bona fide concern.—Address, "C. N. D.," care of Mr. Wm. Kaye, stationer, Black-
street, Newcastle-on-Tyne.

TO GENTLEMEN OF INFLUENCE.—The ADVERTISER is
desirous to WORK some extensive and very rich IRON and COAL MINES
that he possesses, and would be glad with the CO-OPERATION of GENTLEMEN of
INFLUENCE to assist him in FORMING a COMPANY for that purpose. The pro-
perty is bona fide, will bear the strictest investigation, and will be brought out in a
perfectly legitimate manner, and yield a large return. This is worth special atten-
tion, and respectable parties will be treated with confidence and liberality.—Address
"B. C. D.," to the care of Mr. Fryer, Newnham, Gloucestershire.

TO MANUFACTURERS AND OTHERS.—TO BE SOLD,
for £10,000, worth £50,000, the MODEL of an ENGINE of WAIR, for making
100 men discharge with accuracy 150,000 musket or rifle balls in one hour. Appli-
cation has been made to Government, but unattended to; they will not look at models,
they require to see the invention in action, which is not in the province or power of
the inventor. One equal to do the work in firing of 20 men in line can be made in a
few days at a small expense.—Address, "To an Old Officer," care of Mr. Wagner,
17, North Audley-street, Grosvenor-square, London.

TO ENGINEERS, MACHINE MAKERS, CONTRACTORS, &c.
—WHEATLEY KIRK and CO. have ON HAND, and READY FOR DELI-
VERY, a very LARGE STOCK, quite new, and the best workmanship, of SLIDING
and SCREW-CUTTING LATHES, HAND LATHES, DRILLING, SLOTTING,
SHAPING, and PLANING MACHINES, HORIZONTAL and VERTICAL STEAM
ENGINES, &c.—Cross-street Chambers, Manchester.

IRON BEAM FOR SALE.—TO BE SOLD CHEAP, an excellent
IRON BEAM, 30 ft. long, about 6 tons weight, with stools, braces, &c., lying
at Fat-work Mines, near the Indian Queens.—For further particulars, apply to
WILLIAM PAINTER, Hayle.

ON SALE.—An 8 inch SECOND-HAND SLIDE and SCREW-
CUTTING LATHE, bed 15 ft. long, with change wheels, &c. Also, HORI-
ZONTAL and VERTICAL STEAM-ENGINES, of 4, 8, 12, 16, and 20-horse power,
finished and in progress.—Apply to JOHN ELLIS, Jun., and BROTHERS, engineers and
manufacturers of steam sawing machinery, 15, Backwater-street, Manchester.

FOR SALE, WITHOUT RESERVE, a 22 in. WINDING STEAM
ENGINE, 9 ft. (double) stroke, with cage, and 9 tons boiler, nearly new, now
lying at Great Onslow Consols Mine.—For particulars, apply to Mr. JESSIE S. PEAR-
SON, Marazion.

COAL AND IRON ORE.—A GENTLEMAN possessing a COAL
SETT in the West of Scotland, partially proved, is desirous of DISPOSING of
PART of HIS INTEREST therein; or for some respectable party to JOIN him in
FORMING a COMPANY for developing and working the same. The sett extends
over about 3000 acres; and, besides coal, there are extensive beds of brown hematite
iron ore on the property.—Apply, by letter (post paid), to "G. A.," 15, Charing-
cross, London.

MINING MANAGEMENT.—A GENTLEMAN, of considerable
experience in the management of companies worked on the Crompton system,
and having suitable offices for the purpose, is PREPARED to TAKE the PURS-
SHIP and ENTIRE TOWN MANAGEMENT of any genuine undertaking. Refer-
ences can be given to the chairman or to the committees of the companies with which
the advertiser has been connected.—Address in the first instance, with particulars,
to "R. S.," Mining Journal office, 26, Fleet-street, London.

WANTED.—A GENTLEMAN, well versed in mining matters,
having for the last six years held the post of secretary to several important
mining companies, wishes for some employment as CLERK, or otherwise, in a
MINING or OTHER OFFICE. From his long experience, he has a knowledge of
accounts and bookkeeping, and every other matter relative to mining transactions.
As he but seeks employment, a moderate salary would only be expected. First-rate
testimonials as to ability, &c.—Address, "E. N. S.," Post-office, Cornhill.

WANTED.—A GENTLEMAN, who has lately had the MANAGE-
MENT of extensive COAL WORKS abroad for upwards of 15 years, is de-
sirous of OBTAINING a SIMILAR SITUATION in any part of Great Britain. He
has been accustomed to level and survey, both above and below ground; and to keep
the accounts by double entry. Unexceptionable references and testimonials can be
given.—Address, "X. Z.," Alveston, near Derby.

WANTED.—A YOUNG MAN, of very respectable connection in
the great mining district of Cornwall, who has been under a school, and
clerk in a merchant's office, is desirous of an ENGAGEMENT as CLERK, or TRAV-
ELLING AGENT.—Address, "J. K. T.," Redruth Post-office, Cornwall.

WANTED, at the UNYSCEDWYN IRONWORKS, near SWAN-
SEA, a MANAGER. No party need apply whose character and competency
will not bear the strictest investigation.—Apply to JAMES SWINCK, Esq., Swansea.

WANTED.—MINING SHARES in DIVIDEND or PROGRESS-
IVE MINES, in EXCHANGE for some valuable PAINTINGS by old mas-
ters—Murillo, Mogarib, Sir Peter Lely, and others.—to the extent of from £250 to
£3000 worth, or any portion thereof.—Address, "H. J. M.," care of Mr. Manuel
26, Austinfriars, London.—N.B. No objection to exchange in part for good wines.

WANTED, TO ADVANCE MONEY upon the security of RAIL-
WAY STOCKS and SHARES, and other equally marketable securities, at
a low rate of interest.—Address (post paid) to "H. B.," No. 6, Victoria-terrace,
Notting-hill.

BRISTOL MINING INSTITUTE.—WANTED, an EXPE-
RIENCED TEACHER and LECTURER, acquainted with the art of coal
mining, with its best examples and its latest improvements; as well as with survey-
ing, drawing, bookkeeping, and the application of the sciences of mathematics, me-
chanics, and geology. Salary not under £300 per annum. Detail of qualifications
and testimonials to be sent to Mr. HANDEY COOPER, Shoosdow Lodge, near Bristol,
on or before the 1st January, 1855. All applications to be in writing.

FIRST QUALITY SULPHATE OF BARYTES, in THE CRU-
STATE.—WANTED, about 500 tons per annum, free on board at port of de-
parture.—Apply, by letter only, with sample, addressed to "J. H.," Mining Office,
18, King's Arms-yard, London.

FOR SALE.—20 Trevelyan Mining Shares; 50 North Towy and
Cyston.—Apply to Wm. BAWDEN, mine agent, 2, Bank Chambers, London.
Dec. 15, 1854.

SHARES FOR SALE in the following really FIRST-RATE MINES:
—20 Wheal Wrey, (say) £5 5s; 10 Great Wheal Baddern, £2 15s; 7 North
Trevelyan, £0 10s.—Others received for three days, addressed J. MITCHELL, 2, Campden-
hill-terrace, Kensington.

WALLER GOLD MINE.—FOR SALE, THREE HUNDRED
SHARES.—Apply, by letter, to Mr. HODGINS, York Chambers, Adelphi,
London.

TO BE SOLD, BY PRIVATE TREATY, SIXTY-FOUR SHARES
IN A LEAD MINE.—This mine is situated in Montgomeryshire. The vein
averages about 7 ins. in width, and runs nearly due east and west; it was discovered
in 1845, and has made good returns. The mine is drained by an adit level for 50 fms.,
and below this level the vein has been recently opened for 30 fms., with steam power
for raising the water to the adit level. The whole extent of ground, from east to
west, is about 750 to 800 fms. Lease for 21 years. Royalty, 1-10th on the ore above
adit, and 1-14th below adit.—For further particulars, apply to the undersigned, or to
Mr. JOHN WATKINS, solicitor, Caernarvon. N.B. Note the principal, or these sales
agents, need apply.

GROVER, TOULMIN, and CHESTER, 11, Staple Inn, London.

FOREIGN VINEYARD ASSOCIATION.

Completely registered, capital £200,000, in 10,000 shares, for the supply of Wines to Private Families, Hotels, Messes, Clubs, &c.
 CHAIRMAN—The Right Hon. Lord MUSKERRY, Carlton Club.
 With six other directors from the principal Clubs of London.

MANAGER—T. W. STAPLETON, Esq., 31, King-street, Regent-street.
 The wholesale sale of wines is adopted by this company. All wines will be strictly of the growth represented, and in every case pure. Private families can have same in large or small quantities, for prompt payment, after receipt and approval of samples. Examples of advantage in prices—The finest Champagne, hitherto charged £10 10s. per case of 36 quarts; Most and Chandon's first quality (direct from the firm), hitherto £12 12s., now £9 9s.; Claret, the finest Chateau B. Margaux, or Chateau Brane Cantenac, both under lease to the company, formerly £12 13s., now £7 4s.; Sherries, formerly 35s., now 25s. per dozen; finest Xeres imported, 55s., now 44s.; Ports in same ratio; finest Cognac, pale or brown, 35s. per gallon.

INDISPUTABLE LIFE POLICY COMPANY.

73, LOMBARD STREET, AND 24, CONNAUGHT TERRACE.
 RICHARD MALINS, Esq., Q.C., M.P. RICHARD SPOONER, Esq., M.P.
 JAMES FULLER MADDOX, Esq. JOHN CAMPBELL RENTON, Esq.
 WILLIAM WILBERFORCE, Esq.
 A reduction of 25 per cent. has been made on the premiums of all policies of five years' standing.

ECONOMIC LIFE ASSURANCE SOCIETY.

The Right Hon. Sir T. FRANKLAND LEWIS, Bart., M.P.—CHAIRMAN.
 HENRY FREDERICK STEPHENSON, Esq.—DEPUTY-CHAIRMAN.
 ADVANTAGES.
 The LOWEST RATES OF PREMIUM ON THE MUTUAL SYSTEM.
 The WHOLE OF THE PROFITS divided among the assured every fifth year.
 No charge for policy stamps, nor for service in the Yeomanry or Militia corps.
 Policies in force, nearly 7000.
 The Assurance Fund exceeds £1,400,000. Income upwards of £250,000 per annum.
 The sum of £397,000 was added to policies at the last division, which produced an average bonus of 257 per cent. on the premiums paid.
 For particulars, apply to
 ALEXANDER MACDONALD, Secretary, 6, New Bridge-street, Blackfriars.
 SPECIAL NOTICE.—Proposals for assurance must be made prior to the 1st Jan., 1859, to entitle the assured to participate in the next division of profits, in 1859.

ARK INDISPUTABLE MUTUAL ASSURANCE SOCIETY.

CHIEF OFFICES.—No. 138, LEADENHALL STREET, LONDON.
 Established 1852.—Incorporated Pursuant to Act of Parliament.
 Guarantee Capital, £100,000.

The Hon. FRANCIS HENRY FITZARDINGE BERKELEY, M.P., Victoria-square, Piccadilly.
 JOHN SADDLER, Esq., M.P., Gloucester-square, Hyde-park.
 SAMUEL CARTWRIGHT, Esq., F.R.S., Old Burlington-street.
 ROBERT KEATING, Esq., M.P., Clapham-park, Surrey.
 J. W. WATSON, Esq., Ph.D., C.E., F.G.S., Upper Brook-st., Grosvenor-square.

DIRECTORS.
 SAMUEL CARTWRIGHT, Esq., F.R.S., Old Burlington-street.
 CHARLES NICHOLSON, Esq., St. Paul's Church-yard.
 JOHN GRANTHAM ROBINSON, Esq., Gunter-grove, Brompton.
 Hon. C. T. SHEFFINGTON, St. John's Villas, Upper Holloway.
 WILLIAM EPPORTH TUKE Esq., Upper Avenue-road, Regent's Park.
 J. W. WATSON, Esq., Ph.D., C.E., F.G.S., Upper Brook-st., Grosvenor-square.
 AUDITORS—Anthony Peck, Esq., M.A., Public Auditor; William Slade Parker, Esq.; Henry Chatterton, Esq.

MEDICAL OFFICERS—Erasmus Wilson, Esq., F.R.S., and F.R.C.S., Henrietta-street, Cavendish-square; Richard Quain, Esq., M.D., Harley-street, Cavendish-square.
 CONSULTING ACTUARY—Arthur Scratchley, Esq., M.A., F.R.A.S.
 BARRISTERS—The London and County Bank, 21, Lombard-street, City; St. George's-place, Knightsbridge; and Connaught-square, Edgware-road; and most of the Provincial Towns.

SOLICITORS—Messrs. Long and Long, Cornhill.
 SECRETARY—John Madden, Esq.
 CHIEF OFFICES.—138, LEADENHALL STREET, LONDON.

This society continues to grant policies, and includes amongst its leading features the following:—

1. An ample guarantee capital.
2. The whole of the profits, after deducting the necessary percentage for the guarantee capital, are divisible amongst the assured.
3. The policies are absolutely indisputable, and their validity cannot, under any circumstances, be contested against the children or assignees of the assured, except in cases of fraud.
4. The annuities issued by the society increase periodically, from a share of the profits arising in that department.
5. Self-protecting policies are issued, combining the advantages of an endowment at a specified age to accrue to the assured himself, or an annuity payable during his life, to commence from the period when he would receive such endowment, or an assurance payable to his heirs in the event of his not attaining the specified age.
6. Policies can be effected upon which only one-half of the premium need be paid for the first two years; the remaining half being payable at the convenience of the assured, or deducting ultimately from the sum assured. Credit is also given for the whole amount of the first five years' premium on collateral security.
7. Temporary advances are made to parties who are unable to pay their premiums as they fall due, and to facilitate the effecting of new assurances.
8. Apprentice fee endowments are granted, also endowments to educate and portion children.
9. Policies effected for the whole of life are transferable to other lives of not greater age, and of good health at the time of transfer. Creditors assuring the lives of debtors will find this feature peculiarly advantageous.
10. The amount assured may, when it becomes a claim, remain at interest (from 4 per cent. upwards) until the claim is paid, and equal to the value of the policy months' notice on either side. This will be found of great convenience to widows and others who have merely a life interest in the sum assured, and who have no other channel of investment but the public funds, which give but 3 per cent.
11. Clergymen can obtain advances to assist them making repairs in parsonage houses, and other tenements on church property, and to meet the outlay for dilapidations.
12. In the event of a policy being surrendered through the absolute incapacity of the assured to continue his premiums, the society guarantees to give the assured a free policy for a reduced amount payable at death, and equal to the value of the policy which he discontinues. It is unnecessary to insist upon the importance of this feature, which is quite novel in life assurance.
13. A diminution of half-a-year is made on the amount of premiums, when persons assure within six months of their last birthday.
14. The charges for policy stamps and medical examination are in all cases defrayed by the society itself, and no entrance fees are required.
15. Premiums may be paid annually, half-yearly, or quarterly.
16. Thirty days' grace allowed for the payment of premiums payable yearly; and 15 days for those payable half-yearly or quarterly.
17. Lapsed policies may be revived within six months, upon satisfactory evidence of unimpaired health, and upon payment of a small fine in addition to arrears of premium with interest.
18. Transfers and assignments are recognised and allowed by the society.
19. No extra premium is required from persons living during time of peace in any part of the world, not within 35° on either side of the equator.
20. All claims are paid within three months after proof of death, or sooner with discount.

Every risk or contingency, whether for families, joint lives, or individuals, is undertaken by the Ark Indisputable Mutual Assurance Society.

ACCIDENT DEPARTMENT ON THE MUTUAL PRINCIPLE.
 Assurances are granted by the society against fatal accident, or against serious accident whether fatal or not. And fixed weekly sums are allowed during disability arising from any kind of accident which does not terminate fatally, together with a sum for medical expenses, and a fixed sum payable at death. In order to provide for the risk of those engaged in naval and military pursuits, assurances are granted against death or loss of limb by accident or violence from any cause whatever. This species of assurance is also particularly valuable to miners, colliers, quarrymen, and others engaged in dangerous occupations where there is a peril of a like nature. In case of death within ten years of such an assurance without accident, the proportion of the profits of this department will be paid to the assured's representatives.

See prospectus of the Accident Department for further details of this new feature, which has been settled specially for the Ark by the eminent actuary, ARTHUR SCRATCHLEY, Esq., M.A.

SAVINGS' BANK AND LIFE ASSURANCE DEPOSIT DEPARTMENT.
 Assurances are granted by the society, payable at death, on the deposit of any sum whatever, with power to be withdrawn at any time during his life to withdraw the whole, or any part, of the amount paid, together with Savings' Bank interest thereon. This is obviously (to the middle and lower classes, one of the most useful features yet introduced into the system of life assurance.

AGENTS WANTED.

APPETITE AND DIGESTION IMPROVED, AND HEALTH PROMOTED.

By the habitual use of that most agreeable condiment, LEA AND PERE'S WORCESTERSHIRE SAUCE.

Applicable to every variety of dish; and sold by the principal dealers universally.

DEAFNESS! DEAFNESS!—IMPORTANT DISCOVERY.

Dr. MANFRED, M.R.C.S., has this day published, free by post for eight postage stamps, a "PHYSICIAN'S GUIDE FOR COUNTRY PATIENTS," for the PERFECT AND PERMANENT RESTORATION OF HEARING, by his invaluable new treatment. Being a step to quickness, cruel impositions on the suffering public, and exorbitant charges, this book will save thousands from the impositions of the self-styled doctors, inasmuch as the hearing can be restored for life. Deafness of the most inveterate nature relieved in half-an-hour, cured in a few hours, and almost instant cessation of noises in the ears and head, by painless treatment. Hundreds of letters may be seen, and persons referred to, who have heard the usual tone of conversation in a few hours.—Patients received daily at Dr. Manfred's residence, 2, Regent-street, London (first door in Air-street), where all letters must be addressed.

The GLENVIEW PATENT STARCH, used in Her Majesty's laundry, is sold by all grocers and silvers; by Robert Witherspoon and Co., 40, Dunlop-street, Glasgow; and Witherspoon, Mackay, and Co., 55, Queen-street, Chelsea, London.

HOLLOWAY'S OINTMENT AND PILLS, WONDERFULLY EFFICACIOUS IN CURING SCROFULA, OLD WOUNDS, AND BAD LEGS.—Mr. L. Fordyce, shoemaker, Forgue, Aberdeenshire, suffered for a long time from a large wound in his thigh, from which disused portions of the bone came out. He was at the Aberdeen Infirmary for several weeks, but in defiance of the treatment there adopted, he became so much worse that the surgeon advised him to have the limb amputated. On his objection to this, he was discharged as incurable, when he commenced using Holloway's ointment and pills, which have so effectively cured him that he is able to resume his work, and now enjoys the most excellent health. Sold by all druggists, and at Professor Holloway's establishments, 245, Strand, London, and 55, Maiden-lane, New York.

ON SCIENCE IN THE MINES.—No. IV.

BY HERBERT MACGOWAN, M.I.M.E., C.E., INSPECTOR OF COAL MINES.

There are, at present, four mining schools about to be commenced by the exertions of the proprietors and managers of mines. The noble efforts of Sir Charles Lemon have not been without their fruit: 15000, is already subscribed in Cornwall, and a county meeting was called for the 12th of September, to inaugurate a central school at Truro. The Newcastle school, formed under the auspices of Mr. Nicholas Wood, and the North of England Institution of Mining Engineers, will be in operation before the close of the year. The town of Swansea, last November, appointed a committee to carry out a mining and trade school; and at Bristol the proprietors of mines having published their opinion that "the necessity of a mining school has long been felt, especially in the difficulty so generally experienced by the proprietors of mines to obtain intelligent men to act in the capacity of bailiffs, overseers, deputies," &c., are actively obtaining subscriptions to commence a central school. Their prospects include three objects:—

1. The bringing out of cheap maps, diagrams, books, &c., suitable for schools, and that will enable the teacher of coal national, British, and other day-schools, in mining districts, to impart to the children a general knowledge of geology, mining, &c.

2. Lectures and courses of instruction at convenient times to enable those who cannot study at such an institution entirely, to obtain information on any particular branch of this subject.

3. The bringing out of cheap maps, diagrams, books, &c., suitable for schools, and that will enable the teacher of coal national, British, and other day-schools, in mining districts, to impart to the children a general knowledge of geology, mining, &c.

To explain the course which we propose to carry out at the Bristol and Swansea schools, I may be permitted to quote from the reply which I had the honour to make to the enquiries of the Bristol Committee.

The overseer and deputies, or bailiffs and under-bailiffs, are everywhere a hard-working, pushing class of men, very anxious to obtain information, provided it applies itself directly to their daily occupations, and the information which I propose should be given is of this very kind, both in the adult evening classes and in the day-schools, although in the latter more elementary knowledge must necessarily be added. Boys from twelve years upwards who can read, write, and do the rule of three, having already worked in the mines, will be taught the science of practice, divested of everything abstract, and consisting for the most part of those rules by the application of which their labour may be improved and shortened. The heads of the studies will be writing, book-keeping, drawing (free-hand and by compass), arithmetic, geometry, surveying, geology, metallurgy, mechanics, machinery, and mining. As an example of the subdivisions of these subjects, the last head includes boring, sinking shafts, tubbing, laying out top and bottom roads, winding, pumping, haulage, timbering, and walling, the various methods of working coal, and the cost of all the above; blasting, ventilation, gases, explosions, the strength of ropes, chains, and materials, their cost and application, accidents and subjects belonging to safety, &c. Surveying should be taught in the mine and in the field, on a system superior to that ordinarily in use; mechanics should be illustrated as far as possible by models; machinery and mining by obtaining access to the large works or the mines, in which respects Bristol is advantageously situated. The situation is central for the Forest of Dean and Monmouthshire, both by position and by a connection in trade. It offers the advantages of museums, laboratories, models, the facility of obtaining lecturers, and the probability of a large influx of scholars unconnected with mining, who by assisting in the payment of the school expenses will enable them to be placed at the lowest figure. Thus it may gradually become a trade school, without deviating at all from its strict object, and pupil teachers from the national or other schools, tutored in places in the mining districts, may take advantage of the technical instruction sufficiently to render the teaching of elementary schools more useful, and spread far and wide amongst the mining class the inclination and the means of becoming better acquainted with those operations on which their livelihood depends. It is not a little remarkable that nowhere in England, so far as I know, is the mechanic instructed in those simple rules by which he may avoid failures, shorten labour, raise his own value, and improve his art. As Bristol was the first town to hold a public meeting for the establishment of a trade school, I trust it will maintain its ancient credit for education, in being the first town in England to establish a school where the principles of coal mining in all its branches will be practically taught, and in any way supposed that this instruction should be confined to the once-bailiffs or under-bailiffs. Manual labour will form no part of the course now proposed. For this we must go back to the mine, and the handicraft of the miner must be learnt by the sweat of his brow, but his superior intelligence will soon mark him out for gradual promotion; and having learnt to understand every branch of his trade, he will, when advanced to positions of trust, become a very superior and efficient overseer. Many of those in the adult class will possess the advantages of practice and experience, and it is, therefore, to this class that we must probably devote the most attention, in order to obtain the earliest evidence of the success of the school. If the cost of education is fixed at 2s. per year, it will be within the reach of any of the mining class who have an earnest desire to improve, and a three years' course will suffice for obtaining all the information which the school can offer. Examinations may be held annually, and money and other prizes and certificates of merit or of approval granted. For accomplishment of these objects, a fund for the purchase of models and apparatus will be required, and a sum of at least 4000, per annum for rent, lighting, and heating, two masters' salaries, books and apparatus. The Government are inclined to guarantee, when desirable, the salaries of the masters for a short period, to find diagrams, prepared by eminent men, at half-price, philosophical apparatus at one-third cost, and to pay salaries to pupil teachers. With the exception of the first, I think these offers may advantageously be accepted. The mining school can place itself in connection with the School of Mines in Jermy-street, of which Sir Henry De la Beche is the director, so as to take advantage of his experience and assistance, and to open out his exhibitions, and other means of higher instruction, to the more promising pupils, without the school being in any way restricted in return.

In choosing a building it is advisable to make provision for 200 pupils in one school-room, for a lecture room of nearly equal size attached to it, with a room for drawing and preserving models, and a fourth room for laboratory and workshop; convenience for washing, being also provided near the entrance.

The principal difficulty which presents itself to me is that of obtaining a suitable head master. The second, or mathematical master, may be advantageously procured from the Greenwich Hospital schools, at a salary of about 400, per year. The head master must necessarily be acquainted with the practical sciences, but the knowledge of mining, of the kind which I propose should be taught, is confined to very few. I am now preparing a complete syllabus of the course of instruction for the approval of the committee. When they have selected a proper head master, I shall be ready, as far as lies in my power, to afford him the means of completing his information, and to deliver a course of lectures on the more technical subjects.

It will be perceived, I hope, that in this outline of the advantages and instruction to be derived from the Bristol Mining School, I have endeavoured to adopt the views of the proprietors and managers of collieries in the South of England and Wales, so far as I have been able to ascertain them. From the enlightened opinions of these gentlemen, from the scarcity of competent overseers or bailiffs, from the increasing depth, extent, and difficulty of coal-workings, I feel confident that the committee will meet with support from all parts of these three counties. We need not fear inadequate funds. It depends, however, on the extent of the contributions on the part of the proprietors, whether the school can be carried out. The English Government, by the aid of the great reforms which civilization has adopted. The English Government, in favouring this movement will only remain faithful to the programme of improvements which appear for many years to have been the object of its most lively solicitude. To cheapen the necessities of life, and to elevate the working classes, have been the avowed objects of the greatest statesmen of England.

HARTLEPOOL GREAT FLOAT AND RAILWAY.—The plans deposited under this title propose to occupy 80 acres on the margin of the lake (which contains upwards of 170 acres, and averages 4½ ft. below high water)—to extend the old tidal harbour considerably inland, and over the site of the present sluice—to deepen the whole harbour by dredging and extending the jetty pier out to the line of the old pier to the Hartlepool side. The great float is to be excavated to 13 ft. below low water, so as to provide ample accommodation for the largest class of ships, steamers, and others sharp-built (which cannot touch the ground), in the event of the gates falling or being left too long open. The great float has also an outlet into the West Harbour, leaving the centre of the lake unoccupied adjacent Middleton. The engineers of this great scheme are Mr. Jas. Abernethy, C.E., London, and Mr. Thos. Melk, C.E., Sunderland. It will be remembered that when the fearful gales of last winter strewed the shores of our coast with wrecks, involving a great sacrifice of life, and the loss of much valuable property, the latter gentleman published a plan, under the title of the "Hartlepool Bay Harbour of Refuge," which embraced the above scheme, together with the enclosure of the bay by two great piers running out into deep water on one side from the Hough, and on the other over the Long Sear Rocks. Plans for such piers, slightly modified, have also been deposited by the Commissioners of the pier and port, prepared by their engineer, Mr. Rendell, C.E.

METROPOLITAN AND PROVINCIAL BREWERY COMPANY.—Among the numerous occupations to which the joint-stock principle of trading has been, and we believe may be, applied with advantage is that of brewing, requiring a considerable capital in the first instance, but quickly making large and profitable returns. The production of the various beverages from malt and hops, known to be so largely remunerative, in which single individuals in few instances can command sufficient capital to engage but on a small scale, the results being much less satisfactory than on a large one, may be met with facility and economy, and the small capital of small capitalists, if it is with pleasure, may call attention to a company recently incorporated by Act of Parliament, under the above title, with a capital of 200,000, in 40,000 shares of 5s. each, its objects and distinctive features being the production of really genuine beer, ale, and stout, at reduced prices; the amounts called upon the shares within reach of all consumers, who, by becoming shareholders, reap the advantages of buyers and sellers; admission of a person as a subscriber by a single payment of 10s., entitling him to a reduction in price, and avoiding all further liability; the privilege of shareholders and subscribers to inspect the operations carried on, the premises, and the materials used; and the admission, after payment of 5 per cent. to the shareholders, of the workmen regularly employed to participate in the surplus profits, in proportion to the wages earned. Mr. William Bastick, the analytical chemist, of Brook-street, Grosvenor-square, has made a scientific examination of the ales and beers produced by the company, and declares them to be perfectly free from all deleterious ingredients, and to contain nothing but what is derived from malt and hops. The company's premises, where operations are at present being carried on, are at Brentford, Middlesex, and Hemel Hempstead, Herts.

Parties claiming to be creditors of the Port Phillip General Emigration, Colonization, and Investment Company, are required to prove their claims before the Master in Chancery.

LITERARY NOTICE.

The Ear in Health and Disease. By WILLIAM HARVEY, F.R.C.S., Surgeon of the Royal Dispensary for Diseases of the Ear. Renshaw, Strand.

This is a very erudite work of some 225 pages, containing practical remarks on the prevention and treatment of deafness, and the volume is illustrated by many wood engravings. This condensed view of diseases of the ear, &c., supplies a desideratum which has long been wanted. Mr. Harvey exposes in the clearest manner that wretched spirit of empiricism which has led many practitioners to treat all cases of deafness as purely of local origin; whereas, they are frequently, and, indeed, generally, to be traced to debility or derangement of the constitution, or, at least, to some organic lesions to which it is exposed. He shows that in an immense number of cases he has relieved the patient by treating them medically, repudiating, as a rule, the resort to operations, violent syringing, &c. He commences by a very elaborate and intelligible account of the anatomy of the ear; next the pathology of the ear, and the causes of deafness. He observes that the pathology of deafness "has long been veiled in very considerable obscurity. The complicated structure of this beautiful mechanism has, however, presented difficulties more formidable than appear in reality to the study of the functional arrangement, as well as the organic lesions to which it is exposed." He contends that intense hearing from close mental application, accompanied with noises in the ears, are frequent precursors of nervous deafness, which in many instances might be avoided by timely and judicious treatment of the premonitory symptoms; and that in other cases deafness is ushered in by long-continued dyspepsia, nervous irritability, or shows the inapplicability and danger of using many of the instruments which are used by ordinary practitioners. The rest of the work is devoted to what we may learn disquisitions on Tinnitus Aurium, Otosclerosis, &c. The chapter on Deafness in connection with Deafness is one of the most interesting character; and it is abounds with perfectly novel views in respect to the vast subject on which it bears the stamp of a mind overflowing with the most profound research and thought. No practitioner who purposes making the ear his study should be without this volume in his library, especially as we really believe that so much information is conveyed to the student, that it will save him many months of intense application in searching for authorities elsewhere.

ENDLESS RAILWAY CART AND WAGON WHEEL.—At the present

ment, when all the scientific improvements of the age are being more or less applied to agricultural purposes, every discovery or invention, whether by steam or by mechanical power, for superseding difficulties and reducing expense becomes of paramount importance to all engaged in such pursuits. Mr. Boydell, formerly of the Farm Iron Works, near Dudley, having patented an ingenious arrangement of wheels, so constructed as to carry with it its own railway, gave an opportunity to landowners, farmers, and others from the country, attending in London to the Cattle Show, to witness its capabilities, by an invitation to see it in operation during the four days of that exhibition, at the Camden Works, of Messrs. Boydell and Glasier, Hawley-crescent, Camden Town. This wheel is constructed with a series of sections of rails around it, forming a regular polygon, and so arranged that when in motion there is just sufficient play to allow the wheels to pass over one another in succession presents itself on the ground, when the hinder one appears, and next to receive the wheel on its next rotation. From the explanations given from the experiments which we witnessed, it was demonstrated that a cart with a patent endless railway, loaded with 2 tons, could be drawn a given distance, by 12 men, and that a cart without it, with the same load, and drawn the same distance, required no less than 8½ oxen. These effectively comparative experiments were made by arrangement of pulleys and requisite weights; and further to show the efficiency of the patent apparatus, two men drew a cart fitted with the patent wheel over a purposely cut up into ridges, with moderate exertion, and with ease, and compared with the common wheel, which could scarcely be made to overcome the resistance. It also further appears well adapted for ploughing land, whether by steam or other power, and overcoming the numerous obstacles inseparable from wheel-ridges on agricultural lands. Mr. Boydell has had much experience in land cultivation and culture, and during the past ten years has had various patents for railway ironwork for agricultural purposes, consisting of gates, posts, fencing, harrows, roofs, rafters, palisades, with improvements in railway traction, with useful scientific applications, on which information can be obtained by application to the works. The patentee is also the author of *A Treatise on Land Property, Geology, Agriculture, Chemical, Mechanical, and Political Relations*, published in 1845, which was noticed by us at the time.

LONDON AND WESTERN DISTRICTS CEMETERY COMPANY.—The attention of the public to the pollution of the disease-engendering and disgusting burying the human dead in localities closely inhabited by the living, and for the necessity of establishing proper extramural places of interment, has now become a matter of all classes of the community. Even the Church, that body ever opposed to all change and improvement, particularly where its interests are in jeopardy, tacitly acknowledges the correctness, in this instance, of popular opinion, and pretends to be convinced, on receiving a consideration for infringement on vested rights. These circumstances, numerous cemeteries have of late years sprung up in various parts of the suburbs of London and other large towns, with more or less accommodation for the intended purposes, and we have now with pleasure to notice a new formed company under the above title, established with a view to afford that additional facility which it is generally admitted is urgently required, no less than grounds having recently been closed in the metropolitan and western districts. For purpose, it is proposed to appropriate 60 acres of land at Parkhill, Isleworth, 7½ miles from Hyde Park Corner, which has been offered to the directors absolutely and conditionally, on such terms as will enable them effectually to drain, enclose, and complete all the necessary arrangements, with chapels, other required buildings, every convenience, for a sum considerably under 50,000, including the necessary ground for the intended purposes, and we have now with pleasure to notice a new formed company under the above title, established with a view to afford that additional facility which it is generally admitted is urgently required, no less than grounds having recently been closed in the metropolitan and western districts. 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TREATMENT OF COPPER ORES.

ON PRACTICAL AND THEORETICAL MINE AGENTS, &c.

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ON VENTILATING MINES—PARSEY'S PATENT AEROMETERS
AND AIR-PUMPS.

ON VENTILATING MINES—PARSEY'S PATENT AEROMETERS
AND AIR-PUMPS.

These details will show the practicability of application to public buildings and crowded assembly-rooms; and by always driving the air through water, no dust is conveyed with it. In cold weather, the air can be drawn through hot water, so as not to cause a cold blast; and all draught which is not ventilatory can be avoided by the management of the pipes.

The two sets of blowers and revolving air-pumps separately, and in combination, according to circumstances and requirements, are too numerous to detail, but for blowing for blast-furnaces in furnaces a volume and power of blast may be obtained, the patentee conceives, with very considerable economy of steam-power. As

ANTHRACITE COAL, AND THE SMOKE NUISANCE.

ANTHRACITE COAL, AND THE SMOKE NUISANCE.

Are the statements that have been made in favour of anthracite all false? or can it be that the very valuable quality which it in so great a degree possesses (I allude to its economy in consumption) presents in itself, in many instances, a bar to its more extensive application?—*London, Dec. 14.* VERITAS.

FALLACIOUS VALUE OF MINING SHARES.

No.	Mine.	Paid.	Profit.
6000	North Wheel Basset	nil.	£ 3 6 0
6440	Par Console	1 2 6	23 6 0
6000	West Basset	1 10 0	1 10 0
9000	South Tamar	1 6 6	2 2 6
20000	Mining Company of Ireland.	7 0 0	9 12 6
12000	Cobre (copper)	40 0 0	65 12 0

MINERAL WEALTH OF CORNWALL AND DEVON.

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* Will pay again, notwithstanding the freight occasioned by the multitude of shares.

N. ENNOR'S REMARKS ON MINING.

CORNISH MERCHANTS, AND LONDON ADVENTURERS.

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Dec. 12. A. C. COLEMAN.

ESCAIR MWYN MINING COMPANY

ESGAIR MWYN MINING COMPANY.

MINING IN THE LINARES DISTRICT.

MINING IN THE LINARES DISTRICT.

The New Linares Company has excellent mines, but no furnaces nor smelter, no staff of miners, no smelter; it has, however, 1260 to 1500 tons of ore in sight (vide Michel's report) in one of its setts (the San Roque), and great results are confidently expected of the Virgin del Carmen sett. I believe 200 tons per month could soon be obtained from this company's setts, and the raising would gradually increase considerably. I should not be overrating the probable raisings of the two companies' setts on, say, the 31st March next, at 500 tons of ore per month, if ordinary mining intelligence and energy are displayed: 500 tons of ore per month of 70 per cent. for lead, and of 12 ozs. per ton of silver, at \$1, 38 per ton of profit, would give a net profit per annum. Economy could be practicable in every branch of the two companies, if used by a good manager, one sett of mining captains, and one accountant, would suffice. Another important point would also be gained: competition for fuel and carriage would be obviated. I propose that the San Fernando should be merged into the New Linares Company, as the latter is a "registered" company, more to the taste of the English public, and consequently more likely to obtain, in this country, the facilities necessary to bring these fine properties into paying large annual dividends.

London, Dec. 9.

A LARGE SHAREHOLDER IN LINARES MINES.

AVE MARIA GOLD QUARTZ MINING COMPANY.

Sir,—The temperate remarks of your correspondent, "Verax," deserve a reply. In my letter of the 25th Nov., I ventured to assert that the anxious desire of the committee of investigation was to do strict justice to all. Nothing has transpired since to cause me to change the opinion I then formed; on the contrary, I believe it is the wish of the committee, individually and collectively, to do that which is right, in the most comprehensive acceptance of the term; but Sir, your correspondent should be aware that affairs so complicated as are those of the Ave Maria necessarily occupy a considerable time. These complications have already taxed the patience of the committee, as well as those of "Verax"; nevertheless, we have a duty to perform—a duty from which I believe the committee will not shrink.

Referring to the term, "strict justice to all," which appears to have provided your correspondent with a text, "Verax" must know that it can only be obtained by hearing all sides of the question; and, Sir, I may here remark that, so far from the directors having received any preference at the hands of the committee, a considerable part of the preliminary arrangements had been gone through before an interview was had with the directors or their friends. I am now speaking of "the committee." If any individual has been the object of the directors, or whatever amount of prejudice may exist, we should not be discharging our duty did we not accord them an equal opportunity, and equal facility, to state their case. I am not, Sir, disputing the right of your correspondent, "Verax," or indeed of any one connected with this company, to advert to the proceedings of the committee, of which, however, unless a breach of confidence be committed somewhere, they can know little; nor do I object to their offering suggestions or advice calculated to assist in the object the committee have in view. On the contrary, such advice will be most generously received, and, as far as practicable, acted upon. It is surely a matter of regret that "Verax" did not manifest his anxiety, and volunteer his advice, at an earlier period, in order that his name might have appeared on the list of the committee; whereas, Sir, the fact is notorious that it was extremely difficult to obtain a committee at all. Your correspondent has, however, compensated in some measure for this by volunteering his advice to the committee as he says, and perhaps truly, through the only channel accessible to him—viz., that of your invaluable Journal. But in order that we may have the full benefit of the knowledge which "Verax" evidently possesses of the transactions connected with the company, I beg to acquaint your correspondent that any communications he may think proper to address to the committee, should be sent to the secretary, Mr. G. Parker, at No. 24, King William-street, City, under cover to the secretary, shall receive every consideration; and I further apprise him that a personal interview, accompanied by Mr. Gill, would be more highly appreciated. By communicating with the secretary, the time of meeting may be ascertained. I may here remark, by way of explanation, that in consequence of the company not being in possession of any offices, and having no available funds, the committee, through the kindness and courtesy of Mr. Square, agreed to meet at his offices. The proceedings of the committee must be made public, and they must stand or fall, as the board of directors, and the public, is it right, then, to prejudice them, or to throw unbecomingly suspicion on their acts?

The duties of a committee so situated are extremely delicate and peculiar; and the only right course open for their adoption is to treat each and all with proper consideration and courtesy, believing each equally upright and honest, until proved the contrary by the evidence before them; and then, Sir, not shrinking to make public their opinions. How far the committee might be assisted in their efforts to obtain evidence, were they in possession of even a small fund, I leave to the judgment of your correspondent, and of the equally concerned. Let them not, however, imagine the position of the committee of investigation to be that of a comfortable seat. I have ventured thus to trespass at some length on your valuable space, not out of a spirit of recrimination, but to assure all who are concerned in the pending investigation that it is still the anxious desire of the committee that, so far as they are in a position to exercise it, strict justice shall be done to all. I solicit the favour of your giving this communication an equally prominent place in your excellent Journal.

D. C. 13.

P.S.—Of course, all communications must bear the name and address of the writer, and should your correspondent not respond to this invitation, it may become a question with the committee as to whether it would not be advisable to call another meeting of the shareholders, to appoint a committee, possessing the confidence of "Verax," Guedalla, and Co., thus placing it in their power to avoid the "delusion" and "snare" which they now dread, as well as to obtain "justice to all," according to their own acceptance of the term.

THE AGUA FRIA GOLD MINING COMPANY.

Sir,—Will you permit me to avail myself of your columns, to address to the shareholders of the Agua Fria Gold Mining Company a few observations relative to the report presented to them at the annual meeting on Friday last? That report was not issued till the very moment of meeting, when the shareholders present had each a copy put into their hands as they entered the room. What use, I ask, as far as investigation at the meeting is concerned, is a statement of accounts rendered at such a moment? Few people are inclined extemporarily to question the propriety of a statement delivered forth by persons in whom they have confidence; and let a man ever so prompt a critic, if he is to give credit to his own words, he must be content to wait till the next day, when he can read the report at leisure, and at the same time, examine the accounts, in the short half-hour that the meeting occupied? Persons I know applied for a copy of the report several days previous to the meeting. The answer was that it could not be published till the day of meeting, the presumed object of which delay was to give opportunity to embody in it the latest news from the mines. Now, Sir, I just request any of your readers who may happen to be interested in the matter to take that report, and look at the statement of accounts there set forth; and, I ask, is there anything in it which would not have been published many weeks ago? I will not complain of the report, as it is a statement of accounts, and not a statement of the mine, but I do say that the report ought to have been published many weeks ago, and that the report ought to have been published many weeks ago, and that the report ought to have been published many weeks ago.

Look at the statement of accounts, I pray you; it sets forth a summary of working expenses and improvement and development of the mines for a whole twelvemonth, or nearly so, amounting to a very large sum; but on the other side of the accounts, the statement gives the yield of gold only from the month of March to the 15th July last, utterly ignoring all the subsequent regularly increasing remittances up to the very day of meeting. It may be, I believe has been, urged in excuse for the omission, that we have not yet received from California an account of the working expenses to a date later than the 13th July; and as those working expenses will have to be set off against the remittances of gold, it was not proper to insert the latter in that account. No doubt the working expenses must be allowed for; but we may fairly infer that the gold that has been regularly pouring for some time, as it is in a great measure the result of the improvement and development of the mine, the expenses of which for a twelvemonth last past forms such a prominent figure in the accounts. But why ignore the fact of the positive arrival of so much gold? If that fact could not, according to the strict rules of accountancy, be set forth in the balance-sheet, surely there might have been some verbal mention in the report of a fact which goes more to the root of the matter than all the vague calculations and excuses with which we have been so long surrounded. Surely, I say, there ought to have been some mention made of this important fact, and a true statement of our finances not left to transpire only, as it did, in answer to a casual question put by one of the shareholders, and then acted upon by scores of people, who will know nothing of what transpired at the meeting. I myself am utterly at a loss to assign any conceivable motive for this strange omission. Did the directors fear, if it got to the knowledge of the shareholders that there was an amount of cash actually in hand that might be applicable to a considerable dividend, they might insist upon having it at once in that shape, instead of reserving it, as in prudence they ought, for the further development of their property? If so, and the directors were only seeking to cheat the shareholders into their own good, I say that they cannot justly appreciate the just confidence the proprietary repose in the statements to which they have been subjected, and the acquiescence of their affairs. However, be the motive what it may, sure am I that if there had been a deliberate design to disgust us with our property, no report, short of statements which were actually false, could have been more calculated to bring about such a result than was the report which has been the subject of the above comment, if taken unaccompanied by the further statements that were by mere chance elicited at the meeting.—Dec. 11.

QUARTZ ROCK GOLD MINING COMPANY.

Sir,—The following is a copy of the plan to be proposed on Monday, the 18th, at the meeting by the directors, which, after giving at length, I shall proceed to offer another, which I consider preferable, and most feasible. The conclusion I come to is, that the first is wholly impracticable; and, indeed, I am sure will not even 60000, or a fourth of the sum, will be taken up by the shareholders and public.

That 20,000, be raised by loan on debentures—with no liability—to secure repayment of which sum a mortgage on the company's real estate, proper machinery, plant, mines, and effects of every kind at Maxwell's Creek, Mariposa County, California, together with all improvements, extensions, and additions thereto to be hereafter made, shall be given to trustees on behalf of holders of such debentures.

That such debentures shall be issued on the following conditions:—

1. That out of the net profits of the company's operations such debentures shall bear primarily interest at the rate of 10 per cent. per annum.
2. That after payment of the aforesaid interest of 10 per cent. a sum not exceeding 30000, per annum, in the discretion of the shareholders at a general meeting, shall be set aside out of the net profits for reserve, redemption of debentures, or other purposes.
3. That after payment of the 10 per cent. secured to the debenture holders, and the reservation of such sum as the shareholders at a general meeting shall determine to set apart, not exceeding the 30000, aforesaid, then that all the remaining surplus profits shall form a dividend, and be divided ratably on the share capital of the company, as well as the debenture stock, now created.
4. That dividends shall be declared and payable out of profits, at the least twice in every year.
5. That the holders of such debentures, or any of them, shall have the option of converting their debentures into shares of the company, at a discount of 25 per cent., or 15s. for each 100 shares, at any time within three years from the date of creation.
6. That the company shall at any time after the expiration of three years from date of loan, have power to redeem and purchase the whole or part of such debentures as shall not have been converted under the powers aforesaid, on paying to the holders thereof a bonus of 50 per cent., or 90s. for every 100 subscribed.
7. That the mortgage deed shall contain all necessary powers for the protection of the debenture holders, and shall provide that in case the company shall fail to pay any interest out of profits on debentures for three years, and shall make default in payment of such debentures and interest, after six months' notice requiring payment thereof, then the mortgage shall be foreclosed, and the property, machinery, plant, mines, and all improvements and additions made thereto, shall become the absolute property of the debenture holders.
8. That the debenture proprietors shall be entitled to nominate at least two directors of the board of the Quartz Rock Mining Company.
9. That in the event of three-fourths of the sum of 20,000, not being taken up and paid on within one month from the time prescribed for payment, then that the portion paid up shall be returned to the subscribers thereof forthwith, without deduction.

The debentures are to be issued in amounts of 50, and upwards. Were the whole amount forthcoming, it would render the present shares totally valueless. I opposed a similar project in the Veraguas Company, as I foresaw no end of bickerings between the original shareholders and the debenture holders. I should now recommend the present company to be dissolved, and a new one formed, under the title of the Mary Harrison Gold Quartz Rock Mining Company. That each of the present shareholders be entitled to one of the new shares on payment of 1, per share, in two calls, one to be paid on or before the 1st January, and the other on or before the 1st March. That the new scrip be not delivered till the payment of the second call. That Alder-

man Carter be requested to continue his services as chairman, and that his three colleagues be selected from the shareholders at large. Some people may be surprised at my recommendation of the worthy Alderman, but justice compels me to state that whilst all his brother directors absented themselves, he came forward manfully, and bore alone the brunt of my attack. There can be no doubt that more than 12,000 shares were bought on the Stock Exchange, out of the funds of the company for the purpose of rigging the market—a measure that cannot be too highly condemned on principle; but it is not fair to lay the blame wholly on the shoulders of Alderman Carter. I think every one ought to put his shoulders to the wheel, and by a long pull, a strong pull, and a pull altogether, devise some means to carry on the concern, as I consider it would be a great folly, after the large sum already expended, to abandon it. Let bygones be bygones, and now the worst is over, meet the affair boldly. If the company is wound up, it is very questionable if there would be any assets to divide, whereas by little perseverance and a small additional outlay, some of the capital already sunk may possibly be recovered.

Dec. 11.

H. GUDALL.

QUARTZ ROCK GOLD MINING COMPANY.

Sir,—As a large shareholder in this company, I am naturally anxious it should be justly blazoned forth to the world that it will be a sound, well-conducted mine, comprising in its management directors of commercial experience and integrity, and a mining staff, second to none in California. We all know our present unfortunate position has been caused by the deception practised in California (I cannot exactly exonerate the directors on that score from all blame; there should have been a stricter surveillance). The mines are well known to be equal to the Agua Fria and the Agua Caliente, and the directors (I do not say they are infallible, but they are not fools). The report is highly favourable, and his ability and honesty in proving mines cannot for one moment be disputed. It, therefore, befores every shareholder to attend the meeting on Monday, the 18th inst., at the London Tavern, and give his assistance in developing so valuable a property, and purging its management of all impurities, wherever existing, and make sure, before taking up the debentures, the deceptions hitherto practised cannot occur again. I have great confidence in the chairman and directors (I do not say they are infallible, but they are not fools). They would give them the greatest pleasure than that their conduct in the management of our affairs should undergo the most searching investigation, and that the Quartz Rock Company should maintain a high position in the mining world, and prove a profitable channel for the investment of capital. I sincerely trust every shareholder attending the meeting will firmly decide for himself, and not allow himself to be prejudiced—certainly a hard matter, considering the disreputable proceedings of most gold companies, and that not more than five or six can be considered as accredited; at least, I find it so, and no doubt many, like myself, have had to pay for their while, in respect of capital and quartz mining, is unquestionably the most comprehensive and tangible method of rapidly realising the large amount of gold which exists in the Californian mines, and opens up an entirely new field for the profitable investment of over ten millions sterling. I trust, therefore, that you will assist in disposing of the subject forthwith. Water companies pay from 5 to 10 per cent. per month on the capital invested; several have paid as high as 50 per cent. per month on their first introduction. It is only through the medium of water companies that large capitals can be brought to bear productively on the gold business in California. Your commands will be at all times attended to with pleasure.

Brighton, Dec. 13.

P. CADILL.

WATER COMPANIES IN CALIFORNIA.

Sir,—Will you be kind enough to insert the annexed circular: the subject connected with water companies in California presents a field for investment in considerable advance of the general information of the day, and the only one emanating from California which can be at the present period attended with satisfactory results, connected with the large scale of investment.

Quartzburg, Mariposa County, California, Oct. 20.

P. CADILL.

(Circular.)
Sir,—I beg reference to a communication, transmitted per this mail, to the address of the hon. members of the Stock Exchange, on the subject of water companies in California, with a view of having a committee of enquiry appointed to investigate that subject. The distribution of the various rivers in California, to facilitate the operations of placer and quartz mining, is unquestionably the most comprehensive and tangible method of rapidly realising the large amount of gold which exists in the Californian mines, and opens up an entirely new field for the profitable investment of over ten millions sterling. I trust, therefore, that you will assist in disposing of the subject forthwith. Water companies pay from 5 to 10 per cent. per month on the capital invested; several have paid as high as 50 per cent. per month on their first introduction. It is only through the medium of water companies that large capitals can be brought to bear productively on the gold business in California. Your commands will be at all times attended to with pleasure.

Mining Agent, and Agent for the Quartzburg Water Company.

MINING IN AUSTRALIA—ALLEGED DISCOVERY OF TIN.

Sir,—Having seen the following paragraph in the *Melbourne Argus*, May 28, 1854, I should feel obliged if you would insert it in your valuable Journal:—
"Some months ago we noticed the discovery of tin at the Australian Alps, about 200 miles from Melbourne. A company was formed to work the mine, but through some mismanagement it was dissolved. In July last about 10 tons of the ore were brought to Melbourne for sale, and a portion was smelted, and both ore and metal were shipped to London. The quantity discovered is believed to be very considerable."
After seeing this in the *Argus* paper, and knowing of no other company for tin ores than the Owens Mining Company, and concluding that they must have meant that, I say that the above statement is one complete falsehood from the beginning to the end. In the first place, the company only began to search in July last (1853), and there was never any mining carried on (what I call mining), only exploring for a short time with a few hands. Neither were any tin ores ever smelted, or shipped for London, belonging to the company. The company was dissolved in March last, not being able to obtain a lease of land for surface digging. They would not search for lead, and it was considered by the late Governor that it was too great a monopoly to grant them the land in the manner they wanted, as it would interfere with the diggers. As for the tin ores sent home, they were what Mr. Terry bought of the diggers, varying in price from 25s. to 30s. per ton in its rough state, on the spot where it was raised. But I still consider that very rich lodes exist in that locality, and that gold and tin ores will be found in great abundance, if worked for in a mining-like manner; but no discovery has yet been made, except in the surface soil.

Melbourne, May 28. Late Managing Agent for the Owens Mining Company.

AUSTRALIAN FREEHOLD GOLD MINES.

Sir,—Having held a large number of shares in this connection for two years, purchased at 15s. premium, I am happy to find 8s. per share is to be returned; and it appears to me I am indebted to Mr. Guedalla for this miserable pitance—part of which I consider myself in duty bound to present to that gentleman in payment of his expenses and trouble, and hope others interested may think as I do; for I believe no division of the moneys held by this company would have been made if Mr. Guedalla had not attended the meeting. I ask when was he likely to get it? If the directors are paid so handsomely for squandering shareholders' money, I wish to know what is due to shareholders who interest themselves, and save something out of the week? The mismanagement, and want of energy on the part of shareholders generally, has increased our misfortunes, and given directors confidence that they can still carry on with impunity. Our losses have been great; but why make them greater by supineness, and withholding support from those who have the integrity and ability necessary to make the best of our disastrous position? If some energetic measures are not soon taken, we shall be robbed of every shilling. I am beginning to obtain a less and less favourable opinion of the directors, based upon their questionable proceedings; not only in gold mines, but many other public companies. If the Editor of the *Times* condemns a whole profession for one persecuted subaltern, I wonder what his opinion of the British merchant is, after the late exposure? In gold mines, I should think he would say they had decidedly degenerated; I know I think so.—Norwood, Dec. 14.

NIL DESPERANDUM.

THE SAFETY-FUSE, AND MR. R. SYMONS.

Sir,—In your Journal of the 2d inst., I read the ungenerous letter of Mr. R. Symons, respecting the quality of Mr. Brunton's safety-fuse, and should have solicited your attention to the subject last week, were it not that I expected others would have done so. Although, in your Journal of the 9th inst., Mr. Heath so generously and appropriately replied to this extraordinary production, yet from this immediate neighbourhood I find that no one has attempted to confute the allegations therein contained, probably from the fact that every one here, who is at all connected with mining operations, is well aware that Mr. Brunton's safety-fuse has too firmly and universally established its own reputation to be affected either by the praise or censure of the writer. Since I have been a reader of the *Mining Journal*, I do not remember having seen in its columns any remarks so unbecomingly and unkind.

I have no personal knowledge of Mr. Brunton, but of his safety-fuse I have. Mr. Symons says that Mr. Brunton's safety-fuse "did not receive honourable mention" at the Exhibition of 1851. For the accuracy or inaccuracy of this statement I cannot say, not being at that time in England, but was then an importer of safety-fuse in Cheshire; and Mr. Brunton has been sent me, exposed to the view of the climate during a four months' voyage, packed simply in barrels, instead of, as is usual for exportation, being put into tin cases, and where it not only received "honourable mention," but obtained also an extensive sale, and of which, together with that of Messrs. Bickford and Co., and of Messrs. Lanyon and Hocking, I never heard a complaint.—Truro, Dec. 13.

JOHN LEAN.

GENERAL MINING COMPANY FOR IRELAND.

Sir,—I find, at the half-yearly general meeting, held on the 4th inst., in Dublin, that in the report of the directors some reference was made to the late manager; but, after the comments of your Dublin correspondent, and Mr. Powell, one of the auditors, in the last week's *Journal*, my father (the late manager) does not think it worth while to make any remarks on the statements of the chairman; but I think it my duty to notice a few facts, as he (the chairman) stated that there had been advances made to men.
It is true that advances were made to men who had been driving and clearing away, stopping poor ground, and doing sundry works, as Dr. Brady very properly explained. Those advances were 5s. per week, or 10s. per month, without any balance being paid them at the end of the month.
I do not imagine that any reasonable (I would not say respectable) person would expect poor men to work for less than 5s. per week; but this, the chairman asserts, tended much to the demoralising of the habits of those employed. I would ask, can this more than keep body and soul together? But the new system, now boasted of as being adopted, is the supplying a few men with tickets for meal for about 2s. 6d. per week, while the remainder, after working three months, are kept out of their honest due, and have recourse to summonses, of which 17 were served on the manager in one week, and 32 in the next; and although the men were not successful in all cases, they obtained a verdict in several.
The chairman indulged himself in stating the amount of the last year's expenditure, but forgot to state that, when the late manager came to the mines, they had been run together, and worked out of order; and that he had reported to the board that it would require upwards of 18000, to bring in a new adit, and sundry other new work, which the former board ordered him to do; and he had the former board remained in office, the mine would be now making a profit. An engine-house and other buildings have also been erected, which, with the excavations and materials, have cost not less than 120000; adding to this the expenses of the three ponds, which cost about 12000—some of them cost 5000, and will hold no water; neither will work 6d. to the company. It was opened by, and carried out under the entire direc-

tion of the chairman; and yet he asserts that he had nothing to do with these advances, November, 1853. Surely his recollection must have taken leave of absence; but I satisfy himself and the shareholders, I have inserted an extract of letters from the chairman, received by the manager in February and March; and but for this assertion, I should not have written, or noticed the report of the chairman's letter to the shareholders, Dublin, Feb. 11, 1854. Pray, have 25000 shareholders, with picks, bars, spades, and shovels, for Monday morning, as I mean to make a wide, shallow, chop-wood on the hill west of George's. And on the 4th of March he writes as follows:—
In my letter, at Galway, with respect to the pond, the reason I mentioned for its being in order to have a large extent of area along the north-east side, was that it would narrow the road along the place marked by me. And he says, "I will narrow the road, sufficient to show that the honourable chairman had something to do with the ponds—the fact is, he had all to do with them."
Dec. 12.

Dec. 12. The manager writes to the shareholders, about the ponds, and says:—
"I have discovered a simple method of applying air on every piston going to the propulsion of vessels, locomotives, and engines of every kind, especially for draining and purifying mines. I hereby invite engineers and parties interested in the engines at work, as I, John's-lane, Leith, and I promise that every one will be satisfied before going away that air is a far more powerful and simple motive agent than steam. By the plan in question an air chest is necessary, being on the principle of the recently-invented air-gun, the fly-wheel acting the part of the spring."
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Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode in the 130 fms. level, east of Field's engine-shaft, is worth for copper ore 500 per fm. The lode in No. 1 winze, sinking under the 130, east of this shaft, is worth for copper ore 2000 per fathom. The lode in No. 2 winze, sinking under this level, east of this shaft, is worth for copper ore 500 per fm. The south lode in the 120, east of this shaft, is worth for copper ore 400 per fathom. No change in any other lode since the last report. The tributors for the month are 64 men, at the average tribute of 3s. 3d. in 14.—M. WATTS: Dec. 9.

ALTARNUN CONSOLS.—The lode in the west end, in the 30 fms. level, is 2 feet wide, composed of spar and gossan, producing tin, but at present not rich; the only alteration in the east is that the ground is easier for driving, and the shaftmen are still cutting the pit.—R. REYNOLDS: Dec. 13.

BALLESWIDEN UNITED.—We have put our 14-in. plunger-lift to work, and faked the water. I have seen the winze 150 ft. in my last report; the lode is a kindly one, but time would not allow me to break the work and sample it; you will have it in my next. I have set one pitch to six men, at 12s. in 14, and one at the flat-rod shaft to four men, at 12s. in 14. On Monday I shall set several more pitches on tribute; we are now getting in a position for tribute work. The month before last we worked our ground by the fathom, but it would not answer, because there was too much of the country came away with the lode. The men, when on tribute, will work two or three hours a day longer; I know that this tribute work will be best for the mine. We shall now have no trouble with water at the engine-shaft, and consume less coal, less leather, and incur less cost every way. We shall now make discoveries in our 30, 30, and 40 fms. levels, and more places on different lodes. I shall set more pitches on tribute on the flat lode and at flat-rod shaft. On the whole, our prospects are good.—H. MICHELL: Dec. 9.

BAT HOLES.—The California lode, in the deep adit level, is 2 ft. wide, a mixture of spar and capel, faced with lead ore. The cross-cut driving west in the shallow has intersected the first lode—that is, to the west of the California lode; it is about 2 ft. wide, unproductive. There are about 10 fms. more to drive previous to its reaching the lode seen in the quarry, which has a promising appearance. We have weighed for November, on Friday last, 3 tons 2 cwt. of lead ore.—W. BARRATT: Dec. 13.

BEDFORD CONSOLS.—The winze-shaft is sunk 3 fathoms; lode same size as last reported, still producing good gossan and spar, with a small branch on the south-west, composed of peach, pryan, and black ore. In the middle adit, the size of the lode is as yet uncertain, it still carries in gossan, peach, and spar, spotted with yellow ore, and a small branch of pryan, black, and black ore.—J. HOSKINS: Dec. 13.

BEDFORD UNITED.—In the 105 fms. level east the lode is 2 feet wide, composed of spar, muddle, and ore; we are driving by the side of the lode in this level west. In the 115 fms. level east the lode is still worth 9 tons of good ore per fm. Paul's stopes, in the back of this level, are worth 5 tons of ore per fm. Jeffery's stopes are worth 5 tons of ore per fm. In the 105 fms. level the lode is 3 ft. wide, producing saving work. Jackson's stopes, in this level, are worth 4 tons per fm. Eva's winze is in communication with the 115 fms. level. Nothing new in any other parts of the mine worth mentioning.—JAMES PHILLIPS: Dec. 13.

BIRCH ALLER.—Having just come up from underground, I beg to make the following remarks:—Pye's shaft: During the past week the summen have been engaged dividing, easing, and putting ladder road in, so as to throw the kibble to bottom, which being completed, they are cutting pit in the 50 as fast as possible: when finished, they will drive south with all dispatch to get under the lead and barytes gone down from the 40. In the 50 fms. level, north of Pye's shaft, the lode is very regular, it being more than 2½ ft. wide, of black jack, spar, soft barytes, muddle, and spot of lead, in a beautiful stratum of ground; in fact, the character of the ground is such as one would wish to see for the production of lead, it being of a light, soft, lively kilas. In the 40, south of Pye's shaft, there is but little alteration to notice since my last report, the lode continuing to be of the same constitution as I then described. In the winze below the 30 fathom level, south of Pye's shaft, there is a very kindly lode, producing good stones of lead, and had the lead been in a kilas or sparry matrix it would be good work; but the specific gravity of the barytes being so near to that of the lead, makes it very difficult and rare to separate. The engine and all the machinery on the mine are working very well, but we have not sufficient water to keep the mine clear of stuff since we have thrown the kibble to bottom, and we are compelled to have horses for the winze occasionally.—G. R. OSKERS: Dec. 9.

BLACK DOWN.—We are now busily engaged in cutting through the lode in the deep adit level east, and I am happy to say we are now in about 5 ft. we have, therefore, from 8 to 10 ft. more to drive to reach the south foot or foot-wall of the lode; however, so far as seen this is a very strong and masterly lode, and is composed of gossan, muddle, capel, and spar, with occasional good floors of yellow copper ore. I shall, therefore, be able to give you further particulars in my next. I can only now add to this, that I believe a moderate depth this lode will be found profitably productive.—ANDREW BAY: Dec. 14.

BOLENOE.—In the 50 fms. level east the lode is 2 ft. wide. The lode in the 40 east is 3½ ft. wide, with nearly the same appearance as last reported.—W. ROBERTS.

BRONFLOYD.—The ground of our cross-cut improves as we proceed north, although it is still hard; I hope it will be better when we reach the wall. We have had a good mixture of ore the last three days.—J. JONES: Dec. 14.

BRYNAIL.—This week I have got the water down of the shaft on the new lode, and have bored a hole 9 ft. deep to meet the level underneath, which is 3 ft. west of the shaft; I expect a communication will be effected in the early part of the ensuing week, when we shall be enabled to stoop the lode from the western end of it; it is worth 250 per fm. The lode in the bottom of the shaft contains a branch of lead ore 6 in. wide—solid. During the last three or four days the lode in the 10 has been split into branches by patches of gristone crossing it, but each branch has produced good ore at present; there is every probability of their uniting again, when, no doubt, they will produce a compact and good lode of ore. I shall commence driving the 10 west of the cross-cut next Monday, when it is gratifying to say we shall have a pretty good lode to commence upon. The tributors are working much as usual.—J. ROACH: Dec. 13.

BRYN-Y-FEDWEN.—The 26 fms. level, on Cae Conroy lode, has been driven west of the shaft in the past month 1 fm. 2 ft.; the lode in the present end of this level is about 5 ft. wide, producing about 14 cwt. of ore per fm. This level has now passed over 6 fms. 4 ft. in length of ore ground at this place. The winze sinking from the surface, on the south lode, has been sunk 2 fms., and is now down 9 fms. below the surface; the lode in the winze is about 3 ft. wide, producing some good stones of ore. We expect the lode to improve as we go deeper in this place; we are not deep enough as yet for the baring ground. The driving of the 26 fms. level, on the south lode, has been, but there is more muddle. The south underlie lode continues large, and dotted with copper ore; the kilas on the side of the lode is improving for driving. We have not yet intersected the north underlie lode, the kilas on the side of the small spar cross-course, which is 12 fms. east of the great cross-course. The ground continues rather hard for driving.—W. B. COLLOM.

CAMBORNE CONSOLS.—I have no material alteration to notice in either of the levels since last reported.—W. ROBERTS: Dec. 9.

CARADON CONSOLS.—During the past month the men have sunk the engine-shaft 1 fm. 5 ft. 6 in. I would also observe that the ground is still kilas, traversed by numerous branches or droppers of quartz, containing leaders of yellow copper ore. These are all dropping south towards the lode, and I have no doubt that many of them will have fallen into the lode before it reaches the 37, and I entertain great expectations from the lode when seen in conjunction with these branches. The ground in the 37 cross-cut is rather more favourable than it has been; it is becoming larger, and a better cleavage. I expect a lode about 8 or 10 fms. beyond us. In the 27 we are driving south on the western cross-course, to intersect a south lode. There are two or three lodes in that direction which have not been seen below the surface.

CARRIG-HOVA.—These mines are looking most promising. In the lower level the men are driving the east end, and to-day have broken into a very rich bed of copper ore, 3 ft. in breadth. The sum is producing very good ore of high quality. I cannot say how wide the vein is, but it is now about 2 yards. We raised 100 kibles, and shall wind again on Saturday.—T. DAVIES: Dec. 14.

CAROLINE WHEEL PROSPER.—In the adit level no lode has been taken down since my last; the ground by the side of the lode is rather improved, being softer. No. 1 stopes in the back of the adit level are just the same as last reported. No. 2 stopes are rather improved, the lode being about the same width, but it is producing better work for the stamps. All our other work is progressing satisfactorily.—WM. WILLIAMS: Dec. 14.

CARVANNALL.—At the engine-shaft, sinking under the 106 fms. level, the lode is 1 ft. wide, composed of crystallized iron and soft spar. The lode in the 106 fms. level west is 2 feet wide, very kindly. The tribute pitches are looking tolerably well.—W. ROBERTS: Dec. 9.

CEFN CWM BRWYN.—The lode in the deep adit, east of cross-cut, is 3 ft. wide, containing a little ore, and looking more promising, and letting out a great quantity of water; but the ground being very hard, makes our progress in driving rather slow at present, yet we are pushing on at this point with all possible speed. The lode in the 38 fms. level, west of Taylor's shaft, is 4 feet wide, and the part we are carrying is yielding 1 ton 5 cwt. of ore per fathom; this level is pushing on as fast as possible by six men. The three stopes over this level, west of shaft, are looking much as usual, yielding on an average about 1 ton 10 cwt. of ore per fathom. We have suspended the driving of the 38 fathom level, west of the western winze for the present, in consequence of the water being so very quick, which had to be drawn by hand for about 15 fms., and made it rather costly. The three stopes over the 21 fathom level, west of Taylor's shaft, are yielding about 1 ton of ore per fathom on an average. The lode in the winze and stopes in the bottom of the 12 fms. level, 15 fms. east of Taylor's shaft, is 6 feet wide, yielding about 1 ton 15 cwt. of ore per fathom. All the other points throughout the mine are as last reported. We have reduced our underground cost to the amount of about 800 per month, by stopping the 38 fathom level, west of the western winze, and made it rather costly. The three stopes over the 21 fathom level, west of Taylor's shaft, are yielding about 1 ton of ore per fathom on an average. Our next sampling will be about 60 tons, if we are not prevented from dressing by the weather, and we expect to have about 20 tons of blende ready for sale by the end of the present year. The dressing, &c., continues to go on regularly.

CLOWANCE WOOD.—We are driving the adit level west of Slater's shaft, on Slater's lode, is 1 ft. wide, producing stones of copper ore.—E. CROSVY: Dec. 9.

CRAIGWEN.—The silver-lead lode in No. 1 adit has greatly improved this week. The lode in the stopes in the back of the lower adit is not quite so good; it will not now produce more than 1½ ton per fm. The crushers are going every day. The ore turns out well on the floors; I shall send some to the shipping port next week.—HUGH JONES: Dec. 13.

ter had been received from Mr. Atwood, dated 50th October, stating generally that the yield continued to be favourable and the prospects good.

The SECRETARY, in reply to a question by a shareholder, stated that the total amount of gold received this year up to the end of October was 3476 ozs., valued at 11,366l.

The CHAIRMAN observed, that the cost of working the quartz under water level at Gold Hill was, in round numbers, from 4½ to 5½, and the yield about 52½, which would leave a profit of from 40s. to 45s. or 46s. per ton.

Mr. CLIVE (a director) said, that the total amount of gold received from the Grass Valley Mine was 2558 ozs., of which 1367 ozs. were included in the present report; and from the Agua Fria Mine 917 ozs., of which 433 ozs. were included in the report. Thus, about 1790 ozs. more had been received since the date to which the statement of accounts was made up.

A SHAREHOLDER considered the explanation just given very satisfactory, and placed a much more favourable complexion upon the property than the report itself did. Mr. CLIVE stated, that the value of the gold varied from 36s. to 37½. per oz. To the end of August the mines had been worked at a loss; in September the receipts balanced the charges; and in October there had been a decided profit, the yield being about 100 ozs. more than in the previous month.

The report having been unanimously adopted, the directors were re-elected, and the proceedings terminated with a vote of thanks to the chairman.

MARIQUITA AND NEW GRANADA MINING COMPANY.

A meeting of shareholders was held at the London Tavern, yesterday, for the purpose of receiving the report of Mr. Gower, on his visit to the company's mines at Mariquita and Santa Ana, and to adopt such measures as may be expedient on the purchase of the Purima Mines, and also to consider certain alterations proposed in a regulation signed by a competent number of shareholders.

Mr. J. D. POWLES in the chair.

The SECRETARY having read the notice convening the meeting, Mr. RICHARDSON put in a protest against Mr. Powles occupying the chair, upon the ground that he was owner of the Purima Mines, and disqualified, under the 7th and 8th Vics., cap. 10, sec. 29.

The Chairman having received the protest, Mr. MAPLES (the solicitor to the company) said there was no legal objection to Mr. Powles occupying the chair.

Mr. RICHARDSON: Well, let the protest be entered.

The CHAIRMAN, in explanation, observed, that it was not until many months after the company was in operation that he ever heard of the Purima Mines. He had hoped that the interval that had elapsed since the last meeting would have caused the feeling of irritation to subside, and that they would simply meet for one object—the interest of the company. He would now proceed to read the report of Mr. Gower. The chairman then read a very able and elaborate report from Mr. Gower, of which the subjoined is an abstract:

Mr. Gower arrived at Santa Ana on the 17th of Aug., and occupied himself daily in visiting every part of the company's establishment, in company with the active and intelligent superintendent, Mr. Johnson. It was gratifying to find that a great and decided improvement had taken place in the ores that were then being raised from the Santa Ana Mine, they were extremely rich: some of the buckets as they came out of the mine averaging nearly 400 oz. of fine silver per ton. These ores were principally obtained from the north side of the deep ground, or "horse," which has been worked through in the 90. There is every appearance that a supply of the present valuable ore will be continued while sinking at Illingworth's shaft, from the 90 to the 100, an opinion which he found fully confirmed on his second visit, on the 22d October. There were, however, several things to be done to complete the development of the resources of the establishment. Mr. Gower brought with him a few specimens of ore, which he picked from the heap raised as it came from the 90. On one piece, when broken, a small particle of gold was discovered, the first, he was assured, ever before seen from the Santa Ana Mine. The late sinking of Illingworth's shaft to the 100 bears out the opinion expressed by all parties on the spot who have known the mine for years past, and studied its character, that the deeper it is worked the richer the lode will become. On the whole, he left Santa Ana with a strong impression of the great capabilities of the establishment to produce in time large results to the company, and arrived at Mariquita on the 23d inst., and inspected the whole of that establishment, which he found in excellent order, and all the works conducted with regularity. The mines had been injuriously affected by the labourers having absented themselves to avoid military duty, and also by an unusually long continuance of dry weather, impeding the action of the stamping-mills. Mr. Gower next visited Purima Mines, where he arrived on the 15th Sept., and to ascertain, in the most accurate manner, the value of the property, he requested the assistance of Capt. Thomas Eastman and Messrs. Charles and Thomas Johnson. The site of the mines at work is very convenient, the workings being from levels, with sufficient drainage without engines; labour is cheap, good, and plentiful, the healthiness of the spot making it a favourite with the natives. According to the gold dust diary, from the 2d to the 21st of October, the returns were 1344½ castellanos, about 12½ lbs. New Granada weight, or about 186 troy ozs., and the Purima gold coming out at 21 carats, fine, is worth 3s. 14s. per troy oz., which gives 688l. produce of 18 working days, or 38l. per diem. Mr. Gower, considering it desirable to secure these mines, entered into a treaty with the various parties interested, and for the whole of the property, mines, oro corridos, water-courses, stamping-mills, &c., at the rate of 40,000l., including the sums already advanced by the company, amounting to 15,000l., having given drafts on the company for the remaining 25,000l., at dates extending over a period of 15 months. Possession of the mines was taken by the company on the 1st of October, and they are now being worked for its account. Mr. Gower concludes—"I am quite aware that in taking this step I have taken upon myself a large discretion, but I do not think any other course of proceeding would have secured to the company a due return for the outlay it has already incurred. I consider a great addition has been made to the stability of the company. It possesses now three excellent mining establishments, independent of each other, all yielding profit; and as the financial arrangements of the company are completed, I believe the proprietors may look forward to the regular payment of dividends on their shares."

The CHAIRMAN continued, that as Mr. Gower was present, he should refer to that gentleman for any further information, and he felt certain he would be most happy to give it.

Mr. GOWER, in answer to questions, stated that the report proved the profit on the working; and during the time he was there he had no rain. He had no doubt but the stream washings would pay the whole expenses of the mine.

Mr. ROUTH said it really seemed to him, from the statement made, that the Purima Mines were likely to turn out the very best of the three; but, although that might be the case, it was worthy of consideration whether additional capital should not be raised, in order that the ordinary dividends might be paid upon the other portion of the property.

The CHAIRMAN agreed that the suggestion was a valuable one, and that they ought to increase the capital to the extent of 25,000l., which might be done by the issue of preference shares, upon such terms as would induce the existing shareholders to take them up. Mr. GOWER said, with regard to the Purima Mines, there was a good dividend upon the present working, and if they spent about 2000l. more, he was satisfied the profits would be more than doubled.

To enable them to have sufficient capital to start properly.

After a very lengthened discussion, during which the adoption of Mr. Gower's report was pressed; but, at the earnest solicitation of the chairman, the resolution was withdrawn, and it was unanimously agreed to adjourn the meeting until the 27th inst. It was also resolved unanimously, that Mr. Ward be requested to resume his seat at the board of management.

WEEKLY LIST OF NEW PATENTS.

WEEKLY LIST OF PATENTS SEALED.

G. W. Knoeker: Motive-power.—W. Easde: Securing goods on and loading railway trucks.—R. Peters: Steam-engines.—T. Craig and A. Deschamps: Railways.—J. H. Johnson: Incrustation of steam-bollers.—C. Gibson: Brick and tile making machinery.—W. Hurst: Railway-chairs.—S. Shaw: Marking metal plates, and new template.—E. Edlund: Electro-magnetic telegraph apparatus.—R. Canliffe: Brick and tile making machinery.—J. D. M. Stirling: Metallic tubes.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

W. Branton, Camborne—Improvements in metallic pistons. [ways.]
W. Pole, Storey's-gate, Westminster—Improvements in the construction of railway engines and carriages, and of machinery.

R. Evers, Birmingham, and W. Wells, Sutton Colefield—Improved method of manufacturing certain kinds of metallic tubes.
J. M'Innis, Liverpool—Improved composition for coating the bottoms of iron-ships, to prevent their fouling, and other useful purposes.

E. A. Brooman, Fleet-street—Improved mill for grinding and pulverising paints and various vegetable and mineral substances. [notes of soda.]
J. H. Johnson, Lincoln's Inn-fields—Improvements in the manufacture of carbonyl gas, and the utilization of the gaseous products for heating and other useful metallic purposes.

J. B. Chauvet, St. Aix, Provence—A new system of anchor.
M. Poole, Avenue-road—Improvements in condensers.

W. Rhyte, Oswaldtwistle, and E. Kopp, Accrington—Improvements in the manufacture of soda ash and sulphuric acid.
W. Crosshill, Berkeley—Improvements in the construction of portable railways.

J. F. J. A. Bouillet, La Chapelle St. Denis, near Paris—Improvements in the manufacture of steel.
J. T. Chance, Birmingham—Improvements in manufacturing articles from the minerals or rocks of the descriptions commonly called basalt or trap, sometimes Rowley-rag, and whinstone.

G. W. Kelsey, Hope-farm, near Folkestone—Improvements in air engines.

Motive Power by Electricity.—Mr. G. E. Doring, of Lookley, Herts, has taken out a patent for obtaining motive power from electricity. The arrangement consists of a flat surface, composed of a series of electro-magnets, on which is made to rock or roll by their galvanic action a cylinder, which either itself constitutes a keeper or armature for all the magnets, or it carries, or has suspended to it, a number of armatures corresponding with the electro-magnets. The object of this arrangement is, that by a succession of small pulls, one long stroke is obtained, and thus the full power of every magnet is secured in succession, without the loss hitherto sustained in most arrangements for producing motive power.

New Lubricating Material.—Mr. George Chendle, of Wolverhampton, has invented a composition for lubricating the bearing parts of machinery, &c., consisting of a mixture of palm oil, tallow, carbonate of soda, carbonate of potash, and bone-fat. The latter is first dissolved in lime-water, or a mixture of lime and alkali water; the carbonates of soda and potash are then added, the oil and tallow added to the solution, and heat applied until the whole is dissolved and incorporated. If too thick, the resulting mixture may be thinned with lime-water.

about the depth of 22 fms. a lode, now known by the name of the new lode, was intersected, underlying south, which continued in the shaft to the present bottom; it is 1½ ft. wide, composed of capel, peach, quartz, pryan, and yellow copper ore, altogether very promising. In the 25 fms. level a cross-cut has been driven north 2 fms., and intersected this new lode, which proved to be at this point about 18 ft. wide, composed of a mixture of capel and kilas, containing black oxide and native copper. The cross-cut continued in the same direction 25 fms., where the Arundell lode is intersected, and cut into 40 ft. without reaching the north wall; the lode in the part thus intersected is composed of capel, an abundance of muddle, black, and quartz, with a little black oxide of copper, about the middle or leading part of the lode. The 50 fms. level has been extended 2 fms., and west 2 fms., and for this distance the lode is composed of capel, pryan, quartz, and an abundance of muddle, with black oxide of copper. The old shaft is sunk on the course of the great lode 18 fms.; for the first 3 fms. it is composed principally of capel, pryan, muddle, and black and yellow copper ore. Watson's shaft, 100 fms. to the west of the Victoria shaft, is down to the adit level, and at this depth is 13 fms. south of the Arundell lode. The adit level has been extended altogether 140 fms., in which three lodes have been met with; the first, 48 fms. from the mouth of the adit, is 18 in. wide, composed of capel and quartz; the second, the new lode before referred to, 25 fms. level, for the better ventilation of the drifts. As there are large quantities of muddle available, samples should be assayed for silver, to enable you to decide on the advisability of turning it in a profitable account. Taking into consideration the indications presented by these masterly and highly-mineralized lodes, from which, although not more than 35 fms. from surface, some good ore has already been raised, and the important fact of their being embedded in kilas, similar to that in which the productive lodes in this district are found, as well as the various intersections by elvan courses, the Arundell Copper Mine will, there can be no reasonable doubt, when developed to a moderate depth, prove as productive and profitable to the proprietors, as the rich mines in the same direction on this side of Dartmouth hills. The borough wood property to the east, which I also looked over, is a very desirable piece of ground, as the lodes of the Arundell shaft pass through it, the main one (the great lode) is already laid open, and its indications are very fine.

The committee were re-elected, and the meeting, which was numerously attended, expressed their satisfaction at the present position and prospects of the enterprise.

SUE RIVER COPPER AND GENERAL MINING COMPANY OF JAMAICA.

A special general meeting of proprietors was held at their offices, in Lime-street, on Tuesday, to consider a proposition of the directors to dissolve the company, to convert the residue of the company's property into cash, and divide the surplus among the shareholders. Mr. H. M. KENNEDY in the chair.

The notice convening the meeting having been read, the report of the directors was submitted, which stated that the company had been formed for working the Sue River property, on which considerable indications of mineral wealth presented themselves, and, as a preliminary step, they had engaged Capt. Holloway and a staff of English miners, as well as assayers, to examine the property. His very discouraging report was submitted to the shareholders at the annual meeting in May last, when it was resolved that, unless some more hopeful prospects were developed in the course of operations recommended by Mr. Holloway, the directors should take into consideration what course it would be best to adopt. With much regret they informed the meeting that nothing had transpired to warrant the belief that any profitable results would arise from further operations, and the moment they came to this conclusion they determined to put a stop to all further expenditure; they therefore discharged Capt. Holloway and the miners, and instructed their agents to convert all stores and materials into money, and having been done. A wish having been expressed by a number of large shareholders that the capital should be embarked in some other mining operations, the directors had enquired into the merits of several propositions made to them, but in no instance was any one of sufficient promise to warrant them in recommending its adoption. No expense had been incurred in these investigations. Under these circumstances, they recommended the immediate winding-up of the affairs of the company. They did this with extreme regret, although they felt with satisfaction that these untoward results had not arisen from any want of attention on their part to the interests of the company. They also took credit for having exercised the strictest economy; they could not state to a fraction, but expected to be able to return 5s. per share.

The CHAIRMAN observed it was with much regret that circumstances did not enable them to lay a more favourable report before the meeting, and that they could not convey the gratifying intelligence of successful mining operations. It was, however, satisfactory to state that they had incurred no expenses but which were unavoidable, and considering the parties employed, and the explorations made, the cost lay had been small. The amount paid up was a little over 18,000l., of which remains for distribution between 8000l. to 9000l., and from this statement he trusted the shareholders would consider they had been economical. He should be happy to hear that other mining companies in Jamaica had been more successful, if only for the interest of the island. It was but justice to Messrs. Wright, Armstrong, and Co., the promoters, to state that although at one period, when the shares were at a high premium, they might have sold to great advantage, they had not parted with a single share, but had added to their interest about 1500, which they had paid upon. The directors also, though holders to a large extent, retained from valuing themselves of the premium, and are still not trafficking in shares for private emolument, but they had offered the enterprise to the public as a bona fide undertaking, and one in which they entertained the most reasonable hopes of success.

Resolutions were then passed for winding up, and dividing the proceeds, and for calling a special meeting for Friday next, the 23d inst., at 12 o'clock precisely, to confirm the same, for which see our advertising columns. Thanks were voted to the chairman and directors, and the meeting separated.

AGUA FRIA GOLD MINING COMPANY.

The third annual meeting of shareholders in this company was held on the 4th inst., Mr. CLAY in the chair.

Mr. VIAN (the secretary) read the report of the directors, which stated that at Grass Valley the erection of the steam-engine, and the buildings for the new mill at Gold Hill, was accomplished, and the steam got up by the 27th Aug., but owing to the difficulty in obtaining skilled workmen, and the unusual severity of the following winter, it was not until the 23d of Feb. that crushing began: since that period various difficulties have impeded, and occasionally suspended, the working of the mill. Many important alterations and improvements have been effected, the cost of which not only exhausted Mr. Hepburn's available means, but necessitated his raising money on such security as he could command at the exorbitant rate of interest current in California. The communication of this fact to the directors was nevertheless accompanied by statements and calculations of so favourable a nature, that the board of directors, in full reliance, both on his own, and Mr. Atwood's zeal and ability, did not hesitate, on their own personal responsibility, to raise a sum of 5000l., by which means the check to the operations was removed, and the company relieved from the high rate of interest then payable. The returns have since presented a uniform and satisfactory increase over the expenditure, and the directors, wishing to keep the amount on which dividends are to be paid as small as possible, having every reason to believe that the debt will be paid out of the monthly profits, do not contemplate asking the assistance of the shareholders. The last remittances were larger in amount, in proportion to the time, than any that had previously been received; and the directors see no reason why these returns should decrease. On the contrary, there are many reasons which induce them to expect a considerable increase, and to believe that the difficulties and delays which have hitherto retarded the progress of the undertaking are at an end, and the favourable anticipations which they had formed of its success will now shortly be realised.—Mariposa District: The product of the mine at Agua Fria has hitherto been small, but an adjoining vein, called Steep's vein, of which a lease has been obtained, has proved rich, the quartz yielding at the rate of 237 per ton, and the date of the last advices Mr. Atwood had proceeded to Agua Fria, to report on this property, as well as the original location of the company, and though his report has not yet arrived, the directors have reason to believe that it will be very favourable.

The accounts of receipts and expenditure for the year ending Sept. 30, 1854, showed—Receipts on shares, interest, profit and loss, and sale of gold to September, 1853, 77,974l. 16s. 9d.; on forfeited shares, 80l.; in part re-payment of general average on Ship Pizen, 3000l.; on dividends on investment, 2992l. 13s. 3d.; on sale of gold (Gold Hill) produce from March, 1854, to July, 13, 4026l. 13s. 4d.; on sale of gold (Agua Fria) produce from March, 1854, to July 13, 1375l. 9s. 5d.; loan account in California, 3639l.; less bills payable drawn in liquidation of the above, 2106l. 10s. 2d.—1520l. 9s. 10d.; balance of accounts, 1639l. 7s. 8d.; total, 89,021l. 3s. 4d. Expenditure per account to September, 1853, 54,361l. 18s. 7d.; expenditure in England, 2024l. 14s. 5d.; expenditure in California: working expenses of Gold Hill Mine from July, 1853, to June, 1854, 9524l. 2s. 4d.; improvement and development of mines at ditto, 6767l. 4s. 11d.; expenses of mine at Agua Fria, 8925l. 13s.; salaries, 1047l. 9s. 6d.; travelling expenses, 162l. 4s.; store ship, 372l. 14s. 7d.; 1854, discount and commission, 783l. 10s.; balance, 1040l. 7s. 6d.; total, 88,021l. 3s. 4d. The CHAIRMAN observed, that in the way of facts he had nothing to add to the statements contained in the document just read. It had been debated at the board, whether it would not be better to hold the meeting of that day merely *pro forma*, and adjourn the business until they had something more definite to communicate; but as that course might be misunderstood, it was thought better not to postpone the business of the present annual meeting. Having great confidence in the reports of their officers at the mine, the directors had looked forward anxiously for the speedy realization of the hopes they had been from the first led to form of the prospects of the company. Upon this point, however, they were doubtful:—1. Whether the supply of auriferous quartz was as represented—viz., so abundant as to be practically without limit.—2. Whether it could be reduced, and the gold extracted and sent to market, at the moderate price they had been told; and 3. This had been the greatest doubt of all, whether machinery could be procured equal to the crushing of 100 to 150 tons every day of the hardest quartz in the world; and, if procured, that it would last any time. All these points of doubt might now be said to be settled in favour of the company. They had been placed in some temporary difficulty, through several diggers working above them diverting the stream of water from their machinery; but during the rainy season—that is, for some four or five months in the year—there had been sufficient water; and the reason why the directors had felt some desire to postpone this meeting for six weeks or two months was, that they might be in a position to report the result of the working during a portion of the rainy season, which commenced about the end of November. They felt that if during the month of December, and the other rainy months, the returns were as large, or anything like as large, as they had been led to expect, and remained during the dry months as good as they had been in September and October, the speculation must be anything but a bad one, though its being as profitable as has been originally calculated upon would mostly depend upon their obtaining a sufficient supply of water all the year round, which must, in a great measure, depend upon the means of the company to incur an additional expenditure for engineering works. Since the report had been printed, a let-

PENHAUGER.—We are still driving north on the course of the lode in favourable ground; the lode is composed of gossan, with occasional spots of lead.—W. JENKIN; Cock: Dec. 12.

to be reported; in the west end of this level the lode is 6 ft. wide, producing tin. In the

the and satisfactory shape, and the money market becomes more easy, we look for an increased business in shares when the year is fairly turned.

Notes to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

TIN ORES FORMED IN FURNACE FLUES.—Sir: I should be glad if, in your next Journal, Capt. Wilkin will give a description of the stone of tin ore found in the flues of the Wheal Vor smelting-house, stating whether it was pure tin ore (as I expect it was), or whether mixed with any other substance; against what substance it was formed, and whether against a protruding stone in the flue, or simply against the side, bottom, or top? I consider this a very interesting circumstance, and not at all unlikely to occur. —*Miner: Lelant, Hayle, Dec. 13.*

BORING.—The address of Mr. Philip Wall, agent for Kind's system of boring, is No. 3, New Palace-yard, Westminster, where our correspondents may address him.

J. J. (Leeds).—As there is no recognised mart, it becomes in all cases a matter of negotiation; this is to be lamented, but while the present system is in force it is unavoidable.

MENDIP HILLS MINE.—Sir: A correspondent enquired, a fortnight ago, respecting the tactfulness of the Mendip Company. I was informed by an engineer of repute that the mineral found there is a paradox, which no one could divine; that the mine consisted of an evidently superficial deposit of mineralised stuff, without any indication whence it was brought, and without any corresponding deposit in the neighbourhood; and that the discovery would soon be exhausted—a subject for the curious. —*E. W.: Dec. 13.*

"TYRO" (Liverpool).—The white metal slags are never thrown away, they are always smelted in the ore furnaces; the refinery slags are generally in the metal furnace.

GREAT HERMAN MINE.—Sir: Can you inform me why there has been no meeting in this adventure, or when any statement of the affairs is to be laid before the shareholders? From my knowledge of the concern, I anticipated some good results before this, but the great depression in the price of the shares leads me to suspect there is something rotten in the concern. Is it in the management, Cornish or London? Let each answer for themselves. —*A SHAREHOLDER: City, Dec. 14.*

"EX FAMO DARE LACUM" (Hornsey).—We have endeavoured to avail ourselves of the opportunity of witnessing the effects of Green's Fuel Economiser and Smoke Consumer at Messrs. Hartley, Ponsford, and Co.'s City Flour Mills, Upper Thames-street, where only, we believe, it is in operation in London. On our visit, however, an accident had happened to it, which prevented its use. In about a fortnight, we expect to be in a position fully to describe its action. The patentee is Mr. Edward Green, Phoenix Works, Wakefield.

"T. C. S." (Baker-street).—The object of the water companies formed in California is more especially to supply the miners. As wood is so scarce, and, consequently, expensive, it is anticipated that, in a few years, many of the companies now using steam will be necessitated to have recourse to water-power.

ESKDALE MOUNTAIN MINE.—Sir: As a precious specimen of the mess London committees or directors make of mining business, I send you these particulars:—A resolution is passed, on the 26th inst., that 1793 shares be issued at 17s. the holders of such shares to be allowed 5 per cent. discount for cash at once, otherwise to pay by instalments of 2s. 6d. down, and 2s. 6d. per share at intervals of a month—such shares, when the sum of 17s. shall be paid, to rank in every respect as ordinary shares, on which 2s. 6d. per share has been paid. By this arrangement, one-half the value of the property is destroyed at one fell swoop. The public, on asking the value of Eskdale Mountain shares, henceforth will be told that some of them were issued at 27s. and some at 17s.; but that now they are all of one value, and this in the face of an improving property. If the directors are such sorry financiers, and deal so ignorantly with a common commercial question, will they exclude the press? But what, in the name of common sense, can be expected of their deliberations in the elucidation of difficult problems of practical mining? —*A SHAREHOLDER: Dec. 12.*

"G. G." (Lincoln).—The committee of investigation of the Ave Maria Gold Mining Company have not yet published a report of the state of affairs. It would appear that early in the present year the funds were all expended.

CATTLE DINAS.—A shareholder in this mine, through your valuable Journal, wishes to ask his brother shareholders if it would not be very desirable to send the report and statement of accounts, together with any other information the committee will give us, to each person at least ten days before the next general meeting, as the shareholders would then be better prepared for attending the meeting? As I much fear that shareholders generally, at the present time, know but little about the affairs of the company, there have not having been any reports given in the Mining Journal since the last general meeting, I think such a course more desirable. I fear, too, that shareholders generally do not trouble themselves about it as much as they should: hence comes bad management. —*T.: Bristol, Dec. 14.*

GOLD IN ENGLAND.—Sir: An old, if not a hackneyed, Americanism runs, that one "Gasper" had a foot so incomparably long, that he invariably hauled on his inexpressibles over his head. The moral, probably, lies in the universally acknowledged strength of the axiom that, whatever evil may stare a man in the face, he is not compelled to accept as an eventually the necessity of quietly putting his foot in it. Query: May not, I suggest, such a moral be worthy the best consideration and the reflection of the shareholders in our modern El Dorados just now? Gentlemen, "get thee glass eyes." —*Vino: Dec. 10.*

"W. L." (Plymouth).—The communication is too personal. It is much to be regretted that, in these letters, on both sides of the question, so much scurrility should be exercised by those concerned.

"T. C. B." (Brighton).—If the Cost-book System was rigidly carried out, such mistakes could not occur: at every 12-monthly meeting all liabilities should be discharged. From time to time we have stated this, and drawn public attention to it. Our warning voice has been heeded; and the moment that those who have disregarded our advice find that they have been duped, our advice and assistance is immediately invoked, and we are invited to redress mining grievances. "Forewarned is forearmed." Before embarking in an undertaking, those speculating should investigate its stability and the respectability of those connected with it. If such were invariably the case, it would not be necessary to be constantly appealing to our columns.

CWMDYLE ROCK AND GREEN LAKE MINES.—We have heard that sufficient ore is now being raised to pay the whole of the cost, and that favourable results may be expected in the ensuing spring. The next meeting will be held early in January.

J. P. E." (Wolverhampton).—In the Mining Journal of 2d inst. we briefly referred to a novel construction of bridges, either for railways or common roads, promising full particulars in a subsequent Number. We have now the necessary drawings and specification, from which, accompanied by illustrative diagrams, a full description will appear in our next week's Journal.

LADY GRENVILLE MINE.—Sir: It is respecting the Lady Grenville, and not Wheal Grenville, that information is much needed. These shares (the Lady Grenville) with 17s. paid, a very few months back, were carried suddenly up to 27s. per share; and, in consequence of that, on the faith of the statements and promises which I have reason for believing emanated from the very office of the company, that many, and myself amongst them, were induced to advance their money upon the shares, considering that they must certainly represent property to some extent. Suddenly, however, the premium vanished, and the capital, if not the mine itself, has become next to extinct. Now, Sir, surely it is not too much to ask for some explanation of this state of things. The mine we know to be situated in the most favoured and promising position in Cornwall, and it is only a title of the representations and reports that were so rife about the mine I have mentioned, a highly remunerative undertaking. But neither the secretary, manager, nor any one of the directors design a word of explanation or information. The salutary precautionary measures now recommended by the Committee of the Stock Exchange, will, doubtless, be productive of good, as averting, it is to be hoped, much mischief and fraud; and if the criminal prosecutions now contemplated against the several nefarious issues are energetically carried out, it will more than anything else effectually secure us from similar depredations for the future. And some process equally stringent and effective, I hope, may soon be discovered, applicable to such ostentatious and refractory gentry as those now in the management of some of our home mines. —*Avon: Dec. 14.*

"Miner" (Cambridge).—There is no lead produced in Norway. In Dalecarlia, in Sweden, a not inconsiderable quantity is raised; the principal market for this is Stockholm. At the Kongberg Silver Works, in Norway, they are obliged to import lead from England for the purpose of refining. The production of lead in Russia is very insignificant.

GOLD MINING COMPANIES.—Sir: Is it not preposterous that several of the companies should persist in carrying on gold mine operations, as they call it, in Australia, and this after having proved their ignorance of everything connected with gold mining, and against the wishes of the shareholders, more especially when it is well-known no successful result can ensue, as has been proved by companies conducted by able, honest men. The operations of most Australian gold mining companies are conducted in the following way:—Every share belonging to the directors is successfully employed in carrying out machinery made by directors; and provisions, &c., sold by directors and consigned to merchants, in whom directors are greatly interested; and, of course, the thing can be very easily worked after that fashion, for the benefit of directors and the ruin of shareholders. Gold mining is quite left out of the question, as has been proved beyond a doubt; but land jobbing and share dealing, and giving employment to needy relatives as officials, added to the above, make the sum total of all Australian gold mining. Now, the best way to stop this is for every shareholder to come forward with the knowledge of what is going on, or one shilling, or two shillings per share, if necessary, and place it in the hands of a committee of gentlemen instead of known ability and the strictest integrity, to take whatever steps may be deemed most desirable to make directors disgorge what has been so unjustly withheld; for if allowed to go on, every sixpence must be swallowed up in advancing the interests of directors; and, rather than such should be the case, I would cheerfully sacrifice all in supporting a well-regulated movement to obtain my rights. I am a large holder in two companies, prepared for investment at a high premium, and have held them nearly two years, and shall have much pleasure in responding to any movement conducted by parties of known experience and integrity, as far as money is concerned; other assistance I cannot give. —*PERSEVERANCE: Dec. 14.*

We have particularly to request that subscribers and others, in paying accounts, will send cheques or post-office orders, in preference to postage-stamps.

NOTICE TO SUBSCRIBERS.—The Journal may be obtained of any bookseller or news-vendor in the kingdom, price 6d. weekly, or 11s. 6s. per annum. Although we do not recommend the subscription to be made by direct remittance, if there is any difficulty in obtaining it through an agent, we supply it direct from the office, on receipt of a post-office order in favour of Wm. Salmon Mansell, as acting for the proprietors. As regards foreign subscribers, it is necessary that the amount for postage payable in England should be added, and the remittance made by draft on demand on a house in London. We give the amounts to be added for some of the principal countries, for their guidance:—Italy and Portugal, 8s. 8d.; Holland, 4s. 4d.; other parts of Europe require no postage. As, however, the postage payable on receipt of newspapers sent through France is exorbitant, when transmitted from our office, we would advise subscribers in those parts to apply at the post-office in their respective districts, by which means they will be supplied on payment, in advance, of the subscription, together with a small per-centage thereon (usually 10 per cent.), which covers the cost of transmission. In France, the amount payable on receipt is 4 cents. The postage to the United States, British North America, Australia, and New Zealand, is 4s. 4d.; Foreign West India, California, and Mexico, 8s. 8d.; Chili, 17s. 4d. (other parts of South America free). All foreign subscriptions must be paid in advance, to ensure the regular transmission of the Journal; but if the subscriber is desirous of discontinuing his subscription, it is absolutely necessary to give notice of the same, otherwise the subscription continues.

PHILLIPS'S METALLURGY.—Sir: I am surprised that Mr. H. F. Blandford, of the Museum of Practical Geology, has, in his confidential authority, attempted to misrepresent a passage which appeared in my letter to you of the 2d inst., referring to Mr. J. Arthur Phillips's Metallurgy. My statement of the distinctness of which was neither intended or calculated to mislead—was that the work in question "is considered a text book by metallurgists, and is used (by the students) in the laboratories of the Government School of Mines," which, I repeat, is the case. —*SCUTATOR: Dec. 13.*

"A CURIOUS CASE" (Tynor).—The importance of the safety-fuse has long been acknowledged, and its merits are well known in all mining districts. The interference of the gentleman referred to may have been imprudent, and to be deprecated, but our columns are not a vehicle for indulging in personal attacks, or joking upon professional avocations. —*SCUTATOR: Dec. 13.*

WHEAL KITTY (St. Agnes).—Sir: I find in your Journal of the 11th Nov., relating to the financial account of these mines, a statement to the effect that I was overpaid the amount of £1. 10s. 9d., for supplies. I beg to inform the shareholders I have never received any money from them but for materials sent in, and that I received a letter on the 12th inst. from Mr. H. H. Pike, purporting to be an error, and that my accounts with Wheal Kitty were balanced. —*ELIZABETH TRENKLELL: St. Agnes, Dec. 13.*

Sir.—Can any of your correspondents inform me to what cause is attributed the wreck of the Zephyr, belonging to one of the directors of the Australian Cordillera Gold Company, freighted with its machinery, and wrecked within seven miles of its destination? —*ONE INTERESTED: London, Dec. 11.*

CATTLE DINAS MINE.—Sir: I was glad to learn, by the notice in your last Journal, that the defaulting shareholders are being compelled to pay up their calls. It would be really too bad of the committee to allow shares to be forfeited, and their arrears of calls cancelled, owned by parties who, perhaps, would have been the very first to have availed themselves of a favourable turn in the market. —*A SHAREHOLDER.*

KENMARE MINE, AND ITS MANAGEMENT.—Sir: I may say, with the late Daniel O'Connell, that, so far as regards the above mine, "I am the best abused man in Ireland." For the indefatigable exertions of your Dublin correspondent and his colleague, in keeping my name in print, I am very much obliged. The modest vituperations of these gentlemen can do me no harm. The motives which induce them are well understood by all who know the parties and the circumstances. I cannot discuss my own abilities with Capt. Thomas respecting mining. Of one thing only I am certain, that I came in at the door of the profession, not over the wall, and passed my degrees under masters whose names have ever stood the highest. If I am, therefore, so ignorant as not to know copper ore from powder smoke, it is my misfortune, and not my fault. —*JAMES SKRIMMIE: Castleblaney, Dec. 13.*

"R. W." (Horrabridge).—If all after-dinner speeches were reported, there are but few parties who could hope to escape censure. Though the individual in question may be inflated in his notions, and abounding in conceit, yet a communication so couched as that of our correspondent, teeming as it does with personalities, it must be seen, cannot appear in our columns.

"G. H." (Exeter).—There is an old adage, "Save me from my friends," and it is to be questioned, if the communication was published, whether it would not rather tend to injure than benefit the party it professes to serve. In many instances, injudicious praise inflicts more injury than direct censure; and where it is written so ambiguously as in the present case, it has much the appearance of severe sarcasm.

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THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, DECEMBER 16, 1854.

The assembling of Parliament, and the hope expressed from the Throne that other matters of importance, besides those relating to the war, would occupy its deliberations, necessarily attract our attention to the subject of improving the state of the law with respect to joint-stock associations. The emphatic declaration of the Legislature in affirming, during the last session, the resolution brought forward by Mr. COLLIER, Q.C., the learned and able Member for Plymouth, that an alteration in the law of unlimited liability in joint-stock companies was essentially requisite, leaves no doubt that it will form a prominent subject for legislation. Forced reluctantly upon the Government by the admirable speech of Mr. COLLIER, when he moved, and triumphantly carried, the resolution, we trust that the pledge given by the Administration will be honourably redeemed by the introduction of a liberal measure.

The resolution of the House of Commons has caused the subject of limited liability to be much discussed during the recess, and it has been prominently brought before the Society for the Improvement of the Law. After much deliberation, that distinguished body have also adopted a series of resolutions, affirming to the fullest extent the principles of the commandment system; and a committee is, we believe, at present considering the frame of a measure to carry out their resolutions. The public announcement by the noble President of the Council, towards the close of the past session, that the question was under the consideration of Government, may be taken as conclusive that the bill will originate with the Department of Trade. We cannot, however, forget the pertinacity with which Mr. CARDWELL sought to defend the opinion expressed by the majority of the Royal Commissioners, deprecating a change in the law of limited liability; and what is most to be apprehended is a bill so framed as to be nugatory in its effects. Half-measures are invariably bad measures, and those which are framed with the view of pleasing every party, seldom prove agreeable to any. The country demands a clear, distinct, and decided measure, suited to the liberal policy of our age, and to the daily extending relations and requirements of our trade. Obsolete prejudices must be laid aside, the interests of classes must be merged into the general commercial weal, and the bill, to be effective, must be free from restrictions and regulations which even lawyers cannot understand, or courts interpret. A law intended to be general should be suited to the ordinary understandings of practical men; and if the Government measure shall be framed with any other object, we trust that Mr. COLLIER will be prepared with a bill of his own, characterised by the manly sound sense and straightforward earnestness which distinguish that gentleman. He has already acquired a deservedly high repute, and a legislative measure, completely enfranchising our commercial code from the mischievous principles of our ancient partnership law, will entitle him to rank amongst the most eminent of our legal reformers.

The question of limited liability has been repeatedly and elaborately discussed in the columns of this Journal. We arranged in strong terms the crude and unsatisfactory conclusions drawn by the Royal Commission, and we congratulated the country on the sentence of condemnation passed upon its report by Parliament. The almost unanimous resolution of the House of Commons may be looked on as final, so far as the principle is concerned: it is unnecessary, therefore, for us to reiterate the arguments which led to that decision. We, however, have considered it our duty regularly to submit to our readers, in a popular form, stripped of legal technicalities, all the cases decided in the superior courts on the law of joint-stock companies, particularly those which have fallen within the operation of the Winding-up Act. The extent to which that law is daily entangling parties, families, and properties in its meshes, is becoming alarming; and the amount of liability to which contrivances find themselves often innocently and unsuspectingly involved, furnishes a further and irresistible argument for an immediate law limiting liability. Contributors, as well as creditors, would then understand their relative positions, and neither could, with any justice, complain. A deliberately considered and accurately framed statute, regulating on equitable terms the limitation of liability, would be the only effectual means of checking the effects of the Winding-up Act, relieving legitimate enterprise from its paralyzing effects, rescuing property from the ruinous expenses it entails, and averting from families its long train of fatal consequences.

As the period is fast approaching when this most important question, so materially affecting our system of mercantile law, will, in all probability, be finally adjusted, and as the President of the Board of Trade stated on Thursday night, in the House of Commons, that the bill prepared by

Government on the subject would be laid before Parliament after the Easter recess, we would earnestly recommend the several Chambers of Commerce, and other similar institutions throughout the country, who feel interested in the proposed measure, to transmit their views, as definitive instructions, to the representatives of the several localities, with respect to the course they should adopt in reference to it.

In bringing before the minds of our readers the importance of ANTI-TRUST, and its usefulness to many of the mining, commercial, and constructive concerns of life, it must not be supposed that the subject is again introduced merely to foster an undue antagonism, either with law as we find it, or with lawyers as they are.

On points where honour or personal position are impugned, or where matters affecting life or liberty of the subject are concerned, the stern, Saxon fairness of our legal institutions appears to be above praise. It is only when business affairs—of account, of services, of varied claims, all resolvable into £. s. d., but differing only as to amount—become perilled by our existing but defective modes of practice, that we elect to make a stand, and to contend for the absolute necessity of a surer and more ready means towards a due adjustment of these financial differences, that appear to be eoal with, and concomitant to, the most active industry: and however the orb legal may illumine or enoble England, many are fully prepared to allow that it has some rather dark spots.

Notwithstanding all the minor evils, difficulties, and glorious uncertainties of the law are proverbially before every man of common foresight, yet how many persons yearly rush headlong into legal proceedings, without heed to the ultimate result. Temper, spirit, finesse, combined with the most craftily arranged stratagetic modes of operation, are sometimes adopted, either to obtain petty advantages over an adversary, or to delay his purpose, but hardly a thought is ever bestowed, nor a concession made in proper time by one, when so immersed in litigation, towards really arranging the respective differences. But when time has dispersed some of the clouds, it is at length, and only through the haze of enormous costs, that either the plaintiff or defendant, or both, will perceive and adopt the course at once, as clearly consonant with common reason as with common sense, if they had but had leisure either to impart or to notice it.

But the judicious use of the powers and capabilities of Arbitration tends to elevate the legal body from official trammels. The Lord Chief Justice only a few days past was reported to have said "he had heard quite enough of the case to say that the best thing that could be done would be to refer it to some one in whom both the parties placed confidence," and we find that after considerable discussion, the proposal was finally accepted to. The proper course, so very pithily indicated by the learned judge, was, however, but the old stumbling-block in brighter outline, rather than any novel process for its removal. The chief bar of such difficulty is, how to find some one to refer it to, in whom both parties would have the required confidence.

And here it will be useful to glance how very readily all the avenues of approach for a negotiation towards Arbitration are guarded. A strong minded client has indeed the power not only to suggest but to order the proper steps to be taken, to effect the submission, but is often appalled afterwards by the absolute power of the very agency he has raised. His legal adviser takes the earliest opportunity gravely to inform him, that if the arbitrator chosen makes an undue award, there is no hope of his proceeding to another court to obtain its reversal. The movement towards decision and finality consequently becomes somewhat paralysed. Both parties deem further negotiation useless; each is anxious to conclude, but all, at any new point, are on the eve of and ready to break up the means of conciliation, in consequence merely of too great pertinacity in the way of management—striving rather as for a bargain than what is equitable to all the parties concerned.

Next, the litigants themselves are sometimes unwilling to confide their matters in difference to one person. Each then chooses an arbitrator, who, in time, can scarcely escape becoming a partizan, or a kind of advocate; and the two arbitrators have first to decide on a referee, to whom all their doubtful points shall be finally submitted; so that, in point of fact, the circle is made only to arrive at the centre, rather than an interchange conversely of the *modus operandi*.

Without doubt, the selection of a competent man to act as arbitrator is not always easily or readily accomplished; with facility to fix upon a sensible man, of comprehensive views, good practical abilities, and wholly removed in position from the interests, and above the control, of all the parties, able to sift the subtleties of argument, and to deduce solid and just conclusions, whereon to found his decision, cannot generally be done at the spur of the moment; but such a step may be made thoughtfully and carefully, and with results immeasurably superior to the chance mode adopted in our present general practice.

A very important question on the liability of shareholders, which arose in the case of PRITCHARD v. the Official Manager of the London and Birmingham Extension Railway Company, under the Winding-up Acts, occupied the attention of the Court of Common Pleas on the 29th Nov. last, and was the subject of a deliberate and unanimous judgment. That company had been only provisionally registered, and was ordered to be wound up on the 20th May, 1849, when an official manager was appointed. The plaintiff made a claim against the company, which, was, in the first instance, disallowed, but was afterwards, upon appeal, allowed as a debt; but the amount due not being ascertained, an action was directed to be brought by the plaintiff against the official manager to establish his demand. That action at law was ultimately referred to Mr. KEATINGE, the Queen's Counsel, who awarded to the plaintiff a sum of 3538s., for which he subsequently obtained a judgment, and issued execution against the goods of the company. To that execution there was a return by the sheriffs of no goods, and a rule was obtained during the last term, calling upon Mr. WISE, a shareholder in the company, to show cause why an execution should not issue against him for the debt under the Winding-up Acts. Cause was now shown on the part of Mr. WISE against the rule, and it was insisted for him that, although the Companies Registration Act, 7 and 8 Vic. c. 110, sec. 6, authorised execution upon a judgment obtained against a company registered, in order to enable it to be enforced against a shareholder in that company, still that such power did not apply to a company merely provisionally registered. The Companies Winding-up Act, 11 and 12 Vic. c. 45, sec. 59, provided that, after the appointment of an official manager, all actions and proceedings at law or in equity which could have been brought or prosecuted against the company, or against any person authorised to be sued as nominal defendant, should, after an order for winding up, be prosecuted against the official manager. It was conceded that by the 57th section, a judgment obtained against an official manager would have the same effect and operation against the property of the company and of the contributors thereto, and might be enforced in like manner as if such judgment had been originally obtained against the company. It was, however, contended that these provisions only applied to a company really registered, and that the Winding-up Act did not extend them to a company only provisionally registered, although in course of being wound up. The Winding-up Acts did not alter the relation or liabilities of a company or its shareholders, or the rights of parties against them; and as the plaintiff could not have maintained at law an action against a company only provisionally registered, so he could not now enforce a judgment which he could not have obtained against the company, by execution against an individual shareholder.

It was argued on the part of the plaintiff in support of the rule that the Winding-up Act applied to companies only provisionally registered, as well as to those completely registered, and had extended the remedies against the latter also to the former. An action against all the members of a company was an action against the company, and, therefore, although an action could not have been maintained against a provisionally registered company by its name, still that it was maintainable against the company as comprising all its members, they being all made defendants. It was, therefore, contended that under the 57th section of the Winding-up Act, the judgment against the official manager could be enforced in the same way as if it had been obtained against all the members of the company, and that it had now the same force as if it had been obtained against Mr. WISE, as one of the defendants on the record. The Court, however, unanimously held that the Winding-up Act did not extend the provisions of the Registration Act; that it did not affect rights, but merely altered remedies; and that Mr. WISE had a right to say that the present action was one which could not have been brought against a company circumstanced as was the present. The 57th section merely provided that a judgment obtained against the official manager might be enforced against a company in those cases only, in which such a judgment could have been obtained against the company itself. The intention and scope of the Winding-up Act was, without interfering with rights, to modify and improve the mode

of enforcing them, and a judgment against an official manager of a registered company can be enforced to the same extent as if obtained against the company itself. The plaintiff's rights and remedies remain, in fact, unaffected, but he cannot enforce against Mr. WISE a judgment which he could not have obtained against a company only provisionally registered. The rule was, therefore, discharged by the full Court.

This decision involves some very important questions.—1. It establishes that a party cannot recover a judgment against a company only provisionally registered as a company.—2. That the statutory remedy against a shareholder, to recover a judgment obtained against a company, can only be enforced against a shareholder in a duly registered company, and does not apply to a shareholder in a company merely provisionally registered.—3. That a judgment obtained against an official manager under the Winding-up Act cannot be summarily enforced by execution against an individual shareholder, unless the company be a registered company, and that such judgment has not at law any effect against a shareholder in a provisionally registered company. It should, however, be distinctly understood, that this decision does not touch the question, as to the practicability of rendering the judgment obtained in this case, against the official manager, available against Mr. WISE in equity, through the instrumentality of the Winding-up Act, and enforcing it by the process of the Court of Chancery, as against a contributory.

[FROM A CORRESPONDENT.]

The question of miners smelting their own ores, as well as the formation of independent reducing establishments, has so very frequently been mooted in the columns of the MINING JOURNAL, without eliciting any practical response, that it would appear to be a work of supererogation again to recur to it. In making these brief remarks, it is not anticipated that they will be received with any attention by that heterogeneous body styled the "mining interest," who on all occasions have only agreed upon one subject—that being a want of unanimity, and a total disregard to legitimate mining enterprise. The Alten Mining Association have since the year 1838 successfully smelted their own produce, paying for their coals from 8s. to 11s. per ton. Owing to the war with Russia during the past year, freights have much increased; and by the stoppage of the Archangel trade, they have been obliged to charter vessels to proceed direct with coals to the works, and return in ballast. This has naturally caused larger expenses; and the coals delivered at the works this year have cost 28s. 6d. per ton. Notwithstanding this enhanced price, although not able to declare a dividend, they have returned a profit of about 2000l. At the meeting, held on the 1st inst., a shareholder enquired if it would not be more profitable for the company to send the ores to Swansea to be smelted than to purchase coals at such an extravagant rate? Mr. WOODFALL, a director, and who some years since was one of the local managers, and whose practical experience should have some weight, stated that the directors had made the most careful calculations. The average per centage of their ores was 5½. To send this to England, in order to pay expenses, it would be necessary that it should be dressed; and even then it was questionable whether it would pay the heavy smelting charges incurred at Swansea. If smelting establishments paying 28s. per ton for coals can realise a profit, what must be the returns of those works where the average price is from 6s. to 6s. per ton? The profits of the smelter are well known to be derived from over weight, water weight, and the assay; and it is not too much to assume that in every ton of ore sold by the miner he is fleeced out of at least 20 per cent. by the smelter. If such were necessary, calculations could be shown, based upon facts, which would fully corroborate this statement. Capital has been expended in gold mines, in the useless search for gold in England; yet a legitimate object like that of copper smelting has always been disregarded. Our smelting establishments, it is a notorious fact, are far behind in improvement, saving of metals, &c., than those on the continent; yet with all this recklessness and waste they make enormous profits. One of the objections urged against copper smelting has been the large capital required; yet we are told the furnaces and plant of the establishment at Alten, capable of smelting 90 tons of ore per week, cost about 2000l. This objection is, therefore, no longer valid. Independent smelting is easily attainable, if those principally interested choose to exert themselves; but it is not to be supposed that, while so much apathy is shown by those concerned in mining enterprise, that the general public will feel an interest in an investment which more particularly affects that body. The Alten Company have shown that Englishmen can smelt independently abroad. Is there any reason why they should not do so at home, and emancipate mineral industry from the thrall of the brazen Swansea oligarchy?

The necessity of extending the Life Assurance system for the benefit of the operative classes throughout the mining districts of England is a subject of such importance, that we have deemed it our duty repeatedly to direct public attention to it, and the matter is now generally receiving very grave consideration. It formed a topic of discussion at the annual meeting of the Royal Institution of Cornwall, held at its Museum in Truro, on Friday, the 17th of November, at which Sir CHARLES LEMON, Bart., M.P., president of the institution, presided.

Dr. BARNHAM, an eminent authority, in alluding to its importance, referred to the recent recommendations of Mr. HERBERT MACKWORTH, the very active and intelligent Government Inspector of Mines, and particularly to the 28th, which is to the following effect:—

XXVIII. That benefit societies should be provided at the joint expense and management of the proprietors and workmen at every mine or works; to provide medical attendance for their workmen and their families, to support them when sick or wounded, and in pension them off when too old to gain a livelihood. That each benefit society should be constituted a branch of some legally constituted insurance company.

In the course of some observations approving of this recommendation, Dr. BARNHAM remarked that the great fault in the present mining benefit societies consisted in their not having any permanent existence, and he urged upon the meeting the propriety of connecting the local societies with some insurance company established on advantageous principles, suited to the mining population, and devoted peculiarly to mining purposes. In the course of the discussion allusion was made to the tables prepared and approved of by Mr. TIMOTHY PRATT, the advising counsel respecting benefit societies, under the authority of Parliament, with reference to miners' assurance offices, and an opinion was generally expressed that those calculations were based on the best information in possession of the Government and of the Registrar-General. The country has, therefore, under the sanction of the highest authorities in the State, the means of forming such societies in every district in connection with a central metropolitan institution; and Cornwall, the principal mining county, has thus taken a prominent lead in this national movement.

We have, in a former number of this Journal, alluded to an insurance company established in London under most flattering auspices, sustained by an influential and extensive proprietary, and particularly suited to the mining districts—the ARK INDISPENSIBLE MUTUAL ASSURANCE SOCIETY. The main characteristics of the comprehensive system presented by this company to the public, consist in its applicability to every exigency, and to every class. Founded on the most liberal principles, and adapting both its scale and its machinery to the altered and extended relations of society, it seems formed to fulfil the very purposes proposed and contemplated by the Royal Institution of Cornwall. It must appear manifest to the philanthropic members of that body, that it is a far more safe and prudent course to open communications, and enter into association with an existing company specially designed for, and peculiarly adapted to, mining interests, than by the formation of a distinct society to create a rivalry which may prove injurious to both. The great element of security in a mutual company is the extensive support which it receives from various and wide spread relations, and the consciousness that it enjoys the favour and confidence of the opulent and industrious in numerous districts is the most unerring test of its value, and the strongest inducement to others to participate in the advantages it presents.

The policy of life assurance is daily assuming new and important phases. While the national gratitude is eagerly exhibiting itself in relieving parental anxiety by securing pensions for those who are maimed, and in providing support for the widows and children of those who have fallen in the service of their country, it would be strange indeed if the operative miner, exposed to perils almost as great, were not equally solicitous for those dependent upon him. A more legitimate appropriation of the Patriotic Fund can hardly be imagined than that which would secure the premiums on policies on the lives of military men engaged in warlike operations; or which would at all events assist in reducing them to the rates of ordinary risks. The Ark Company, by its well-regulated arrangements to insure against injuries, would seem peculiarly suited to the requirements of those engaged in naval and military pursuits, and we may anticipate, from the acknowledged liberality of the principles on which it pro-

cesses to act, that it will afford to our gallant countrymen in arms advantages fully commensurate with any increased rates of insurance.

Savings banks have been slowly, but steadily, making progress in the mining and manufacturing districts of England, and the population are beginning to feel, and to admit, the vast benefits the system affords to the thrifty and industrious. The country is indebted to the Ark Assurance Company for the introduction of a new feature, by associating the benefits of the savings bank with those of life insurance. The combination of both creates a new system of insurance, by means of which this company secures to the party assuring the right to have the premiums produced by his savings and deposited, forthcoming at any time, as his property, and available, with interest, for all his purposes. By adopting the arrangements of the Ark Company, his savings are productive precisely as if they had been lodged to his credit in a savings bank, with this additional advantage—that he also secures, at his death, to his family a sum equal in amount to that which he might have obtained by one payment of a like sum on the ordinary system of life insurance. The deposit system is, therefore, not amongst the least of the many improvements in the system of life insurance for which the British public are indebted to the Ark, and which must tend to render that company peculiarly popular with the operative classes, for whose benefit those improvements were designed and introduced.

The mining population is the one to which the accident department of this company seems particularly adapted. The numerous melancholy catastrophes, even irrespective of fatal ones, of which collieries and mines have been so frequently the scenes, must force upon the prudent, as well as the benevolent, the necessity of making due provision; and it must be deemed an unpardonable dereliction of Christian duty to disregard the security of those on whose labour they depend. Our Courts at the Assizes present numerous actions against proprietors for injuries sustained from machinery in mines, as well as factories, invariably entailing, whatever may be the result, heavy expense upon the parties. The Ark Company tenders to the employers, as well as to the employed, most favourable terms for securing reasonable provisions for the mutilated and the maimed. By well-timed arrangements, all the men in an extensive establishment can be insured, not only against casualties fatal to life, but also against injuries, and their distressing consequences; and while the Ark Company proposes to regulate its rates according to the number of men employed, its system indicates the prudence and propriety of rendering contribution to a general policy fund an essential element even in the terms of hiring. Incalculable would be the advantages to society if the great mining proprietors would, in adopting, advance the principles on which this company is formed, by setting apart a given sum of the profits to insure the lives of the men they employ, and by stipulating, at the same time, with every man entering their employment, that a portion of his wages was to be contributory to the sustenance of the policy. By thus connecting the working men more immediately with the interests of the proprietor, a strong inducement would be created to bind them more closely to the concern, and a safeguard to some extent provided against the ruinous consequences of combinations and strikes.

Mr. JAMES WILSON, M.P., one of the Secretaries of the Treasury, presided at the meeting of the Society of Arts, on Wednesday evening, at which a most important paper was read by Mr. HARRY SCRIVENOR, of Liverpool, "On the Growth and Expansion of our Foreign and Colonial Trade in Iron, and the Fiscal Obstructions to its Extension." In our Journal of the 14th of October we presented to our readers an elaborate notice of Mr. SCRIVENOR's recent valuable publication on the *History of the Iron Trade*; and, as that gentleman has devoted his attention to this important national subject, every communication from him is entitled to the best consideration. Mr. SCRIVENOR brought to the consideration and elucidation of the question much research, combined with extensive practical knowledge, but we pass over some of the earlier historical details, and confine ourselves to the more modern legislation respecting the production and trade in British iron.

Wood was, of course, in early times the fuel exclusively used in the manufacture, but its scarcity began to be felt in the reign of ELIZABETH, and laws were then passed for the protection of timber, which compelled the iron manufacturers to turn their attention to pit coal, but it was not until the early part of the next century that it came into extensive use. In the year 1750, an Act was passed to encourage the make of pig-iron in our American colonies, by admitting it duty free, and also bar-iron, into the port of London. This Act was amended in 1756, extending the importation of bar-iron to all the ports of Great Britain; but the importation, till the time of the war, never averaged above 4000 tons a year. We had then to look to foreign countries, the principal of which were Sweden and Russia, for the necessary supply of iron. From those countries we received from 40,000 to 50,000 tons per annum, which continued till the insane conduct of the Emperor PAUL of Russia, in seizing our ships, and sending our seamen to Siberia, in 1801, drove us back on our own resources; and, with the aid of the blast-engine and improved machinery, we were now able to do altogether without the assistance of Russia, except as regarded the better description of iron for the manufacture of steel. The great increase in the make caused Mr. PRATT, in the year 1797, to propose laying on a duty of 20s. per ton on pig-iron; but, after full consideration, he abandoned the idea. Lord HENRY PERRY, now the Marquis of LANDOWN, who was then Chancellor of the Exchequer, however, revived the subject in 1806, when the make was 250,000 tons. He proposed to levy a duty of 40s. per ton on pig-iron as a war tax; but, after carrying the bill into committee, the Ministers were induced to abandon the measure. In the year 1825, the supply of iron in this country not being in proportion to the demand, and the price then being at an enormous height (15l. 10s. per ton in London), Mr. HERRIES proposed a considerable reduction in the duty on foreign bar-iron, which had gradually risen to 6l. 10s. per ton. This it was proposed to reduce to 30s. per ton. In 1829, Mr. NEILSON, of Glasgow, took out his patent for the application of hot-blast in the manufacture of cast-iron, and this aiding the blackband ironstone, had such an effect, that in about 20 years the make in Scotland rose from 35,000 to 800,000 tons; and the general make of the country, in about 14 years from the reduction of the duty on foreign bar-iron, increased to 1,300,000 tons; and in the years 1851 and 1852 it averaged about 2,700,000 tons. As the blast-engine was entirely unsuited to charcoal furnaces, the make of Russia and Sweden had not been, and could not be, materially increased. In regard to Sweden, Mr. SCRIVENOR considered that it would be advantageous for that country to permit the exportation of iron ore, which could be shipped to Newcastle, and be smelted in our furnaces. Russia had of late years made some considerable reductions in the duties on the manufacture of iron, and there had been some not quite so favourable in Sweden, but they had too great confidence in their own resources to allow of the importation of pig and bar-iron. With regard to other countries of Europe, but more particularly France, which might be taken as a type of the whole, the war, and consequent interruption to commerce, caused several manufacturers to grow up in France, or considerably to extend those in existence, for the successful prosecution of which she was not, under ordinary circumstances, anywhere fitted; of these, iron might be specified as one. The extraordinary demand for warlike instruments gave a powerful stimulus to this manufacture; and, when peace was restored, those engaged in it became involved in considerable difficulties. On their representations, the French Government were induced, in 1814, to raise the duty on foreign iron, which had continued at 2 frs. 20c. the 100 kilogrammes from the year 1790, to 15 frs.; and again, in 1821, an ordinance was published that all foreign iron manufactured by rolling—in fact, English iron—should remain in bond when imported, and should afterwards pay the duty which might be fixed by law when taken out of the warehouse for consumption. The duty was also raised from 15 frs. to 25 frs. the 100 kilogrammes. Notwithstanding this tariff, the trade was not so profitable as it was before; so that in 1835 the duty was reduced 1 fr. 10c., and, in 1838, another 1 fr. 10c., and there were also certain concessions as regarded the importation weight of pig-iron. On the 22d November, 1853, the duty on bar-iron was reduced to 54. 6s. 10d. per ton till the 1st of January, 1854, then to 4l. 8s. per ton, and on pig-iron to 2l. 4s. per ton till the same date, and then to 1l. 15s. 4d. per ton. This, the author thought, was probably all the amelioration we could expect. America, a more important part of the subject as regarded our exports, was next referred to, and it was stated that to protect their employment, which one of their own statesmen considered was unsuited to the "age and condition" of the United States, heavy duties were placed upon the importation of iron. From the 30th of June, 1816, the duty on bar-iron was fixed at 6l. 6s. per ton, at which it remained until 1828, when it was raised to 7l. 14s. 2d. per ton. On pig-iron the duty was fixed at 20 per cent., *ad valorem*, till 1818, when it was altered to 2l. 1s. 8d. per ton, and in 1828 it was raised to 2l. 12s. 1d. per ton. On the 14th of July, 1832, the duty on bar-iron was reduced to

6l. 5s. per ton, and on pig-iron to 2l. 1s. 8d. per ton. This alteration was opposed by the State of South Carolina, and led to the Compromise Act of the 2d of March, 1833, by which all duties on foreign imports were to be gradually reduced to 20 per cent., *ad valorem*, by the 30th June, 1842.

The duties were then again raised, till the great commercial reforms in this country led to a more liberal tariff, which took effect from the 1st of December, 1846, fixing an *ad valorem* duty of 30 per cent. on all descriptions of iron, and 15 per cent. on steel. In conclusion, the author referred to the growth and expansion of our foreign and colonial trade in iron. The requirement of iron was progressive, the great step in advance being the railroad, but this description of iron was only to be met with to any extent in England. It did not come into competition with any home manufacture; it was a national requirement, and must be admitted by a total abandonment or by a great reduction of duty, and our manufacture must be the chief source of supply. The extent of our foreign and colonial trade depended more on the coast than on the duty, so that all our efforts should be exerted to cheapen its production. The paper was accompanied by a table, showing the exports of British iron, including unwrought steel, from the year 1796 to 1852, and by a table of the tariffs of foreign countries relating to iron, with the rates of duty in the years 1846 and 1853, showing the changes that were made within that period, with the per centage or increase or decrease.

We have thus early presented to our readers an outline of this most important paper; and we may, perhaps, be enabled, in our next, to submit to them a copy of the tabular view with which Mr. SCRIVENOR concluded and illustrated his remarks. A very interesting and important discussion followed, in which the chairman took part, during which the future prospects of British enterprise in iron, and the fiscal obstructions by which foreign Governments impeded its progress were fully explained. We propose to resume the subject in our next, and to lay before the public a summary of the very valuable information elicited at this important meeting.

We called the attention of our readers some time ago to the valuable series of letters published in our Journal, by our correspondent, Mr. MICHEL, on the subject of alluvial gold washing by machinery.

We are informed that a project is about to be submitted to the public, embracing his views, and testing the question whether the auriferous deposits partially worked by the multitude will yield a paying profit to the adventurers. Mr. MICHEL, by his calculations, has shown us that we may expect a profit of from 30 to 50 per cent. on the investment, and his scheme combines the elements of simplicity, and a very limited expenditure. Alluvial washing by the aid of steam-power has never yet been attempted in Australia; and it is a singular fact that we find, from the reports of the Colonial Gold Company, that in every case where they have turned their attention to alluvial washings, with the simple mechanism of sluices and long toms, they have obtained paying results. Great difficulties, however, will now probably be found in inducing a cautious public to invest in a gold company. The immense depreciation in gold mining shares, and the mismanagement of the Australian companies, has caused, we fear, an unwillingness among the community to embark even in legitimate speculation. Still, it is possible that even now, in the eleventh hour, Mr. MICHEL may be pointing us out the right way to succeed.

If, then, this plan is brought forward, the question for the enterprising capitalist to consider is whether, provided he has confidence in the directory, as the amount of required capital is so limited, it is not worth while to try the experiment (if experiment it is), and ascertain whether these gold fields can, or cannot, be worked at a profit. Mr. MICHEL speaks confidently on the subject; others, practically acquainted with the matter, are of the same opinion, and many think very favourably of his scheme. We have carefully read his letters, and it appears to us that the secret of his system of profits consists in simply placing the company in the position of the individual digger, but working by the aid of machinery and science, instead of by the rudest implements in the hands of ignorance, and doing on a gigantic scale what the individual does daily on a small one. It certainly has been a matter of surprise to us how it has happened that our companies have never hitherto succeeded in obtaining any considerable amount of gold. The gold is undoubtedly on the spot; thousands of ounces are weekly transmitted to Europe; and yet our companies have failed in success. Mr. MICHEL asserts that their efforts have invariably been made in a wrong direction, and that, so long as the same errors are persisted in, the same lamentable results must accrue.

Some radical error must exist. We do not profess to say what that error is; but Mr. MICHEL's scheme may be a step in the right direction. His statements, and the accuracy of his figures, remain unanswered. Thoroughly master of his subject, he has laid it before the public in all its bearings; and the valuable information contained in his letters, even if they lead to no practical result, deserve the best thanks of the public. We would suggest to the mining world that, before this matter is brought forward, it would not be amiss for those who file our Journal to read over again those letters, and study the subject.

The mineral capabilities of Australia, as a profitable investment for capitalists, is a matter of the utmost importance to this country, and it by no means follows that, because the early mining companies, begun in ignorance, and conducted with imbecility, have failed, that a legitimate, *bona fide* enterprise, conducted on totally different principles, should not yet succeed. At all events, we consider it well worthy a trial, and have, therefore, again directed the notice of our readers to the subject.

A meeting of adventurers in the TAMAR SILVER-LEAD MINE was held on Tuesday, at Salvador House, Bishopsgate (Dr. SPURGIN in the chair); and, for the interest of mining generally, it is to be hoped such meetings may seldom occur. Upon the present occasion, an elaborate report of the committee of investigation was read, and which brought forward such gross acts of mismanagement, that it is difficult to conceive how the parties implicated can explain their conduct. Amongst other charges, the committee stated that they had been foiled in almost every attempt to meet the directors—Mr. STAINSBY being determined that no such meeting should take place; and although the business was conducted nominally by five directors, the affairs were really managed by one (Mr. STAINSBY). In the last 12 months, the total amount expended on the mine was 15,656l. 16s. 9d., whilst the returns were 16,195l. 16s. 7d., for which 17 ore bills were drawn; but the proceeds did not reach the banker's hands until some time after they became due; thus it was found, according to the ledger, the balance in favour of the company was 1002l. 2s. 8d.; but at the same date the cash at the banker's was only 2l. 2s. 8d.—a bill for 1000l., due on the 17th of June, not being paid into the banker's until the 17th of July. In reference also to the expenses of management in London, the total amounts for the 12 months was 620l. 6s.; out of this sum 204l. 4s. was charged for directors and auditors, and instructions were sent down to charge 416l. 2s. in the cost-sheet as sundries.

In conclusion, the report advised a total change in the management of the undertaking. Mr. BURNS, jun., in commenting on the report, contended that the ore bills had not been applied to the company's use, and that false entries were made in the ledger. The directors received salaries for performing certain duties, which they had neglected, and entrusted the whole management to Mr. STAINSBY. The true state of the mine was not laid before the shareholders, and a large amount of capital was wasted through not paying cash for the materials for the mine, when there ought to have been always sufficient capital in hand to do so. The report being read, the CHAIRMAN requested that time might be allowed for them to answer the various charges brought forward, and that the meeting might be adjourned. Mr. HADOW (the chairman of the committee of investigation) said, as Englishmen they were bound to accede to the request of Dr. SPURGIN, but frequently urged the directors to resign, and thus prevent the unpleasant necessity of publishing the report; this, however, they positively refused to do, consequently the report was adopted, and ordered to be printed. Mr. HADOW observed that he had no wish to ride roughly over the directors, but they must be well aware that every statement in the report of the committee of investigation was obtained from their books. In the discussion that ensued language was used by some shareholders, and was immediately checked by the chairman of the committee, which cannot be reported; but, as Mr. LLOYD observed, the conduct of the directors had been such that they must expect harsh words to be applied, and he was afraid that, if mining in this style were continued, "mining" and "sink of iniquity" would be synonymous terms. The proceedings were adjourned to the 2d January, and votes of thanks passed to the committee of investigation, and to Dr. SPURGIN, the chairman. We shall allude more fully to the report in next week's Journal.

The *Cressis* steamer has arrived from Australia with 46,211 ozs. of gold, and 73,142 sovereigns, making a total of 263,980l. Her advices are not so late by nearly three weeks as those brought by the last *Overland Mail*.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

Dec. 15.—The Iron Trade appears to participate in the dulness of commercial transactions generally, nor can it be reasonably expected that it should be otherwise. Our cotton and woollen manufactures are very seriously damaged, and a feeling of distrust appears to have gained strength amongst all mercantile communities; we cannot, therefore, be surprised at the comparative inaction of the iron market. This depression may be traced to the influence of the war in deranging our monetary operations, and to the panic which had seized upon all American projects. The war, which acts so injuriously in promoting the use of iron for the peaceful arts, creates inordinate vigour to those branches of the trade which are occupied in manufacturing weapons of destruction; and in Yorkshire the Low Moor Iron Company are actively engaged in making great quantities of shot, shell, and ordnance, for Government. The proposal to make wrought-iron guns, so ably supported by Mr. Nasmyth, and other scientific men, in the leading daily journals, is one which appears to be fraught with good results—one which, if adopted, will prove of immense advantage in our military and naval warfare, and be the means of giving increased employment to our forges in their construction. The feasibility of it cannot, we think, for a moment be doubted. Good results must accrue from the alliance recently entered into with Austria, and we may fairly expect that the Czar will now be made to succumb to the formidable array of nations in arms against him. The explanation of Lord John Russell, in the House of Commons, on Tuesday evening, with regard to the Austrian treaty, however, had the effect of producing some depression in public securities.

The demand for iron is limited; buyers are unwilling to purchase, in consequence of the uncertainty which hangs over the future, and they are especially deterred by the practice of underselling, which is carried to a great extent, and which destroys all confidence in existing prices. The demand for railway stock, however, continues to be good, and the makers of locomotive engines and railway wheels, and railway ironwork generally, are fully employed. Several contracts are also advertised for rails by old companies, which, coupled with the demand likely to be created for new projects, of considerable extent in the aggregate, will produce a better tone of business in the trade. Plates for shipbuilding continue to be in considerable request, and the demand for hoops is scarcely checked by the approach of winter, although this must put an end to shipments to most of the continental ports. The orders which are received are for immediate delivery, and, from their pressing character, it can easily be shown how small stocks are in this and other countries.

The Scotch Pig-iron market has rallied from its recent depression, and exhibits a firmer character: with the comparatively small stock which is held, it cannot be expected to undergo any great change.

The Sheffield trades generally are experiencing considerable depression. An absence of orders from America, and the rumour of an alteration in the rates for export, have in some measure depressed the trade.

We are glad to learn that some of the Sheffield manufacturers are about to be favoured with a share of the orders of Government for edge tools. A prejudice was some time ago created in reference to the quality of some edge tools furnished to the army in the East, by which their entreprening operations were much impeded. A correspondence took place between the Government and the authorities at Sheffield, the result of which proved that the articles complained of were not made at Sheffield, and the fame of the metropolis edge tools, therefore, remained untarnished. A promise was then elicited from Government that Sheffield should receive a due proportion of Government contracts, and in obedience to this promise, Major Orde, on behalf of the Ordnance department, visited Sheffield on Friday, and inspected a number of the large firms, for the purpose of entering into contracts with them for supplying Government with edge tools.

The Coal Trade is remarkably active, and prices are steady, with no indications of an advance. The season has now so far advanced that the winter demand has fully set in. It is admitted by most coal masters that present supplies, in comparison with those received at this period last year, are double in extent. So long, therefore, as supplies are well kept up, there is no fear of any repetition of the scarcity and dearth which prevailed during the greater part of last winter.

The Over Haddon Gold and Silver Mining Company assembled, on Friday last, at the Chatsworth Hotel, Edensor, Derbyshire, in order to determine which of two modes laid before them for the reduction of their ores they should adopt. The assays of Prof. Mitchell, Mr. Calvert (author of the *Gold Rocks of England*), and also an assay by Mr. Martin, of Sheffield, who was present, were produced, and discussed at length. Mr. W. Condell, M.R.C.S., of Chatsworth, was requested to take the chair, and commenced business by reading the letters of the assayers and their assays, receiving also the remarks of Mr. Martin, on his peculiar mode of operation, and its result. The gold produced by Prof. Mitchell and that by Mr. Martin being placed under the influence of acid in the room, each appeared equally pure, and as the mode of operation in reducing the mineral to gold was different in each case, so was the matter acted upon. The substance sent to Prof. Mitchell being 8 cwt. of every variety of which the various strata is composed, consequently in this mass there would be a great deal that did not possess any commercial value; whilst, on the other hand, Mr. Martin did not operate on the gross mass, but on a quantity of pyrites, separated from the earthy matter by washing, and which produced at the rate of 11 ozs. of fine gold per ton of pyrites. Mr. Calvert, in his assay, certificate No. 1, states the value at 2½ per ton of the gross; and we may justly observe, that Mr. Calvert's assay of two other specimens were not so favourable as No. 1, but No. 1 happens to be that peculiar stratum of which the mine has such abundance.—Mr. Broomhead, of Calver, observed, that he had made statistical observations on the various assays and differential quantities and amounts of the materials sent off from the mine, and found, from the amount of No. 1 sent to Prof. Mitchell, that the two assays were nearly uniform; Prof. Mitchell having produced from the mass sent to him, much of which contained nothing of commercial value, 1 dwt. 13½ grains of gold per ton, without assaying for silver, which is included in Mr. Calvert's assay. A special assay for silver, made by Messrs. Read and Co., of Sheffield, being nearly the same as that given in certificate No. 1 by Mr. Calvert—viz., 5 ozs. 16 dwts. 12 grs. of fine silver per ton; whilst the amount of gold given by Mr. Calvert from No. 1 is 2 dwts. 19 grs. We may here remark, that in order to ascertain the merits of the gold question, Prof. Mitchell has been engaged for some months crushing a variety of ores, on an extensive scale, with a machine of his own invention, and amalgamating the precious metals by the means of mercury, and his calculation is that by his process 2 dwts. of gold will clear the cost of so doing.

Perhaps we ought to have observed that the Over Haddon is a lead mine—that the material has necessarily to be brought to the surface, and consequently, the discovery of gold and silver was accidental, and the endeavours of the proprietors are strictly, at present, experimental, for their own guidance. After Mr. Martin had sufficiently explained the peculiarities of his process, the meeting seemed to think that they had arrived at that stage of proceedings when they should decide upon some plan of operation; whereupon Mr. Burgoyne, of Eysam, observed that he had listened with the most intense interest to the observations that had been made, and it struck him that the best results appeared to have been produced from the pyrites; and as, by the law of gravitation, the pyrites, like other metals, were easily obtained by ordinary crushing and washing, therefore, as this experiment was to be accomplished cheaply, let so much of the mass be thus reduced as would produce 1 ton of pyrites,—let that be operated upon in accordance with Mr. Martin's plan, and the company would get a sound result, almost costless. Mr. Broomhead entirely agreed in those views, and observed that, in addition to the process of washing, filtration through a woollen fabric might be advantageously adopted. Mr. Burgoyne proposed that Mr. Broomhead should take the management of this experiment; and as a majority of the Sallad Holes shareholders were present, if agreeable to them, it should be effected by the assistance of their water-wheel. The motion was seconded by Mr. Jepson and Mr. Bray, of Moorpark, Mr. W. Booth, of Chesterfield, Mr. Bentley, of Middleton, Mr. Heginbotham, and Mr. Burgoyne, the Sallad Holes proprietors, agreed to the same. Mr. Jepson then laid a collection of documents before the meeting which had accumulated in his possession during the time he had been engaged in arriving at the treaty with the Crown. These communications were very satisfactory.

MINERS, AND THE PATRIOTIC FUND.—At a meeting, on Saturday, of the miners employed under Capt. W. Ramsden, at the Merilyn, Orsed, Pen-y-Gelli, Michell, Garreg, Whitford, Mostyn, South Pant-y-Goff, and Halkin Castle Mines, they all cheerfully agreed to leave one day's pay in the hands of Capt. Ramsden towards the Patriotic Fund.

BRASS FORMED BY GALVANIC AGENCY.

Copper is more electro-negative than zinc, and separates more easily from its solutions than a metal less negative. If, then, in order to obtain a deposit of brass by galvanic means, we employ a solution containing the two component metals, copper and zinc, in the proportions in which they would form brass, there will only be produced by the action of the battery a deposit of real copper; the zinc, more difficult of reduction, remains in solution. What must be done, then, to obtain a simultaneous precipitate of the two metals in the proportions required, is either to retard the precipitation of the copper, or to accelerate that of the zinc. This may be effected by forming the bath with a great excess of zinc and very little copper. Dr. Heeren gives the following proportions as having perfectly succeeded:—

There are to be taken of Sulphate of copper	1 part
Warm water	8 "
And then Sulphate of zinc	8 "
Warm water	16 "
Cyanide of potassium	18 "
Warm water	36 "

Each salt is dissolved in its prescribed quantity of water, and the solutions are then mixed; thereupon a precipitate is thrown down, which is either dissolved by agitation alone, or by the addition of a little cyanide of potassium; indeed it does not much matter if the solution be a little troubled. After the addition of 250 parts of distilled water, it is subjected to the action of two Bunsen elements, charged with concentrated nitric acid, mixed with one-tenth of oil of vitriol. The bath is to be heated to ebullition, and is introduced into a glass with a foot, in which the two electrodes are plunged. The object to be covered is suspended from the positive pole, whilst a plate of brass is attached to the negative pole. The two metallic pieces may be placed very near.

The deposit is rapidly formed if the bath be very hot; after a few minutes there is produced a layer of brass, the thickness of which augments rapidly. Deposits of brass have been obtained in this way on copper, zinc, brass, and Britannia metal; these metals were previously well pickled. Iron may, probably, also be coated in this way; but cast-iron is but ill adapted for this operation.

THE COAL TRADE.

The following is a statement of the delivery of coals, &c., in the port of London during the month of November:—

	Ships.	Tons.		Ships.	Tons.
Newcastle	330	128,335	Blyth	19	3,483
Sunderland	191	38,769	Scotch	4	467
Seaham	106	26,551	Welsh	23	8,271
Hartlepool & West Hart. .	218	64,299	Yorkshire, &c. .	3	2,997
Stockton and Middlesbro' .	31	7,120	Small coal and cinders..	1	109

Total

Coals brought by railway, and entered at the Coal Market during the month of November, 1854

Coals brought by canal, and entered at the Coal Market during the month of November, 1854

Coals brought within the London district on common roads, and entered at the Coal Market during the month of November, 1854

Comparative Statement of 1853 and 1854.

Imported from 1st January to 30th Nov., 1853

Imported from 1st January to 30th Nov., 1854

Decrease of ships and increase of tons

THE RAILWAY COAL TRADE.

Monthly statement of coal and coke brought by railway and canal within the London district, during the month of November:—

Railways.	Tons cwt.	Railways.	Tons cwt.
Great Northern	40,577	Great Western	6,160
North-Western	24,512	South-Eastern	1,117
Eastern Counties	15,429		
Total by railway in November, 1854 ..			87,786
Coals by railway in November, 1853 ..			63,671
Coals by canal in November, 1853			2,713

Comparative Statement of 1853 and 1854.

Coals by railway from 1st January to 30th November, 1854

Coals by railway from 1st January to 30th November, 1853

Increase in the year 1854—railways

Coals by canals from 1st January to 30th November, 1854

Coals by canals from 1st January to 30th November, 1853

Increase in the year 1854—canals

IMPROVED ARTIFICIAL FUEL, AND TREATMENT OF ORES.

The subject of the importance of improving the machinery of war has received our serious attention, as recorded in the two last Numbers of the *Mining Journal*, and will be found to have lost none of its interest in our remarks in another part of this day's publication. It is satisfactory to find that not only the public, but the Government are at length fully alive to the necessity of fresh and decisive measures being adopted; for it is now a serious fact, and generally understood, that engines of destruction far exceeding those now in use could have been constructed, and long ere this Sebastopol have been as Bonaeround.

The results of Mr. Nasmyth's offer for constructing artillery of wrought-iron was fully explained in last week's *Journal*. We are perfectly conversant with the steam-hammer, and what can be accomplished by its assistance; but unless a superior quality of iron is brought under its power, it may also prove a failure, and place us in a worse position than before. We would, therefore, call attention to the fact that an English iron gun, after 300 rounds, requires re-venting, and then the entire gun will not stand more than 1000 rounds; while a Belgian gun in one case, after re-venting, stood 6000 fires, and in another case stood the discharge of 2118 fires without re-venting. The Siege of Antwerp, when Belgium separated from Holland in 1830, furnishes historical facts with which our Government should have been acquainted, and of which they should have taken the advantage. General Paixhans, of the French Artillery, was sent to assist the Belgians in the Siege of Antwerp. In company with General Busen he reconnoitred the citadel, and found it to be a place of extraordinary strength. Every point was well sheltered from the effects of shells, and there was, moreover, a moat, which could be filled with water from the sea. The French general then proposed to King Leopold to shorten the siege by means of a mortar, of which the shells would weigh 1000 lbs., and contain each 100 lbs. of powder. This, it was thought, would with a few blows decide the struggle, and cut short the pains and miseries of a protracted siege. The proposal was believed to be inhuman, and it was not until after 50,000 cannon balls and shells had been spent in vain upon the city that the monster mortar—a charcoal casting made at Liege—was brought out. Nine shells were fired, huge flying dragons, one of which burst in the air, and eight descended into the citadel. Two days after the first shell was fired the beleaguered citadel surrendered. A mortar, capable of propelling a shell of such dimensions with any certainty and safety to its attendants, must have been manufactured to the utmost nicety; while charcoal of wood, or peat, which is still better, could only be employed to produce iron fit for such purpose, being more tough, elastic, and free from flaws. It takes 3 tons of coke to make a ton of pig; 1½ ton of charcoal to make a ton of the finest charcoal iron; and it does appear strange that our ironmasters, with such facts before them, will persevere in the use of pit coal, with all its impurities, while millions of tons of peat charcoal may be obtained from our bog lands.

The practice of charring peat was brought into use at a very early period, particularly in Germany, where it was much used, and is said to have been employed in this state in the smelting works of Freyburg, about 1560, as also in some parts of Bohemia, Silesia, Upper Saxony, and other places. In addition to the numerous testimonials of Tredgold, Davy, Letheby, and others, in favour of peat, either in a dried compressed state, or as charcoal, Dr. King esteems it to be "the sweetest and most wholesome fire that can be made; more fit for a chamber, and for consumptive persons than either wood, coal, or charcoal."

It has often been remarked by observant persons who have paid even casual attention to the various processes in use for the smelting and reduction of ores, and the refinement of the resultant metal, how little the march of science has done for metallurgy, the smelting of iron, copper, and other metallic ores, although on a much larger scale than formerly, and with the introduction of new and powerful machinery in the subsequent processes, being still only a modification of the crude, complex, and dilatory operations of our forefathers, and unworthy the advancement of the age. It is with much pleasure we observe that Messrs. Gwynne and Co., of Essex-wharf, Strand, have patented an entirely new method of reducing metallic ores, by the introduction of a system for the effectual application of a fuel, apparently intended by nature for the purpose, by a mode of manipulation which will produce the metal in a perfect state, effect an immense saving in time, and which, when tried on a large scale, and duly appreciated by the iron and other metal trades, is likely completely to revolutionise the present operations of the blast furnace. From their specification, we find the basis of the invention to consist in the production of a fuel from dried, pulverised, and subsequently compressed peat, a process fully described by us in our *Journal* of the 17th of December last, and by which it becomes so solidified as to possess a specific gravity greater than some coal. The patentees propose to introduce, before compression, ores combined with the most suitable reducing and purifying agents in combination with the fuel, and being mixed with the proper relative proportions of such matters, it may be employed, with or without the hot or cold blast, for smelting, reducing, or refining metals. They also propose to make charcoal from compressed peat where it may be required, and also the use of prepared peat in the converting furnaces for the carbonisation of nitrates and alkalis.

The specification states the patent to be for "Improvements in the Manufacture of Fuel; its Preparation and Application for the Reduction of Ores, Fusing and Refining Metals, Cementation of Steel, and Treating Salts;" and we now proceed to describe that part of the process relating to the reduction of metals. The peat fuel having been properly prepared, and pulverised, is combined with other substances, as lime, manganese, &c., and in such quantities, as upon the usual estimates, or testing experiments, to determine with precision the proper working character of the furnace charge it may be found expedient to adopt, and upon which they adjust and determine the character and quantities of these corrective materials best suited for a favourable result. All the necessary substances being pulverised and prepared, the patentees take of the ore itself the quantity intended to operate upon, and to which the materials have been adjusted, and reduce it also to a comminuted state. The ingredients are then thoroughly mixed, the moisture evaporated, and the mass formed by powerful compression into globular lumps of convenient size, which being piled up in the furnace, admit a sufficient quantity of air to play through the interstices, thus affording the necessary oxygen to the carbonaceous portion of the charge.

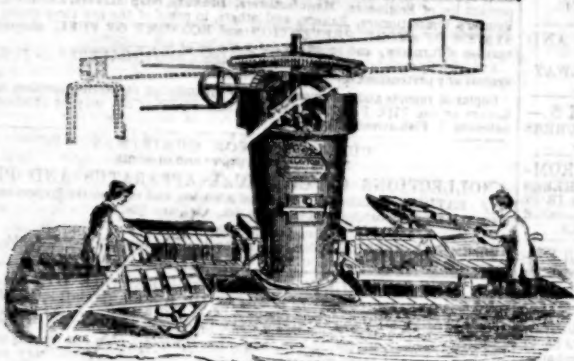
These processes, it will be seen, vary much from the present methods adopted in smelting metallic ores, are based on scientific principles, and evince much ingenuity. Instead of layer over layer of fuel, ore, and flux, the patentees intimately mix and consolidate the whole in blocks, and the fuel being free from all impurities, and the fluxes and correctives being intimately blended with the pulverised ore, the metal is at once reduced and run off in a pure state. In the manufacture of steel particularly, the various qualities of which depend on the proportion of carbon combined with the metal, the patentees are enabled to supply with unerring certainty any particular quality, known by experiment to contain a certain portion of carbon; and thus the engineer or workman may always depend on obtaining, if required, the same description as previously supplied for any particular manufacture. From the experiments already made, results can be produced in much less than half the time at present required; and it is expected eventually in practice it will not exceed one quarter, reducing the cost of the best steel to one-third of the present price, with a corresponding saving in time, and reduction in price, in all other metals.

It may be interesting to many readers who might not have observed it, to state that in the Great Exhibition of 1851 there was a bound volume, the leaves of which were of iron, as thin as ordinary book paper. This iron was manufactured in Germany, from peat charcoal, and by a far more crude and imperfect method than that now patented by Messrs. Gwynne, the general introduction of which appears to us to be likely to form an era in metal manufactures.

IMPROVED TREATMENT OF PEAT AS A FUEL.—Mr. H. C. Lindo, of New York, suggests a simple means of depriving peat or turf of the salts of lime and iron, which it contains in abundance, which act so powerfully in preventing free combustion, and which produce the noxious and uncleanly fuculent white ash. The turf is first placed in a tank, having at bottom a suitable outlet, closed by a valve; a quantity of water is then poured in, to which is added one thousandth part of muriatic acid. After soaking for about six hours, the mass should be well stirred, and at the expiration of twenty-four hours the water is to be withdrawn, by opening the valve. The peat, thoroughly drained, will be ready for moulding into cakes of suitable size, which, when dry, will burn equal to coal or wood.

THE BRIMSTONE TRADE.—The consumption of this article appears to have been increasing of late in this country to a very great extent—the returns showing that 72,155 tons were imported during the ten months ending Nov., against only 35,737 tons within the same period of 1853, and only 28,558 in the ten months of 1852. The month's imports of the three years show an increase from 907 tons and 3858 tons to 5663 tons in 1854. Although a large portion of this great importation may have been required for manufactures other than that of gunpowder, there can be no doubt that a considerable per centage of the increase is attributed to the war.—*Gateshead Observer.*

CLAYTON'S PATENT BRICK-MAKING MACHINE.



Since our first notice of this machine for the manufacture of bricks, tiles, &c., by steam or horse-power, without first separately pugging the clay (being, in fact, a compound machine, performing its functions at one operation), in the *Mining Journal* of 21st January last, we have briefly recorded its rapid progress at various intervals; and in our last Number described a material improvement recently effected, by which a perfect article is produced, particularly in the perfection of the faces and angles. The above diagram will convey a tolerably correct idea of the construction of the machine and its operation. The clay, being first prepared in the ordinary manner, is placed in the vertical cylinder (the pug mill), the arms of which form an Archimedian screw, the blades being in three tiers; the first presses down the clay, the second mixes up the material, and the third is placed nearly vertical, keeping up the horizontal pressure, this series of blades being on the same plane; and thus, while the material is thoroughly incorporated and rendered homogeneous, it is forced through the orifices, one on each side the cylinder, continuously, in a rectangular mass of suitable size, on to a platform of rollers from which the bricks are cut, by an instantaneous hand motion of the wire-cutting frame, seen in the engraving. These orifices are formed of two fixed horizontal curves, and two vertical revolving cylinders, covered with a suitable woven material, constantly moistening themselves with water by ducts from the rollers. In the construction of the machine during the recent season, these cylinders revolved by the friction of the clay in passing between them, but by a recent improvement they are now carried round by gearing from the motive-power, at a somewhat greater speed than the clay moves, thus giving a wiping or smoothing motion, and rendering the faces of the brick perfect. These machines, the main cylindrical shaft of which making seven revolutions a minute, turn out 49 per minute, or nearly 3000 per hour. In addition to the several details in our last week's notice, we may mention that since the injunction granted by the Court of Exchequer, Clayton & Percy, in Feb., 1854, and which Mr. Clayton obtained against the defendant, the patent has been manufactured and sold for use in various parts of the world upwards of 100 machines, of different sizes, varying in price from £100, to £200 each. Although in the early development of the machine it was objected by many that the wires of the hand-cutting frame would be continually fractured, it has been well demonstrated in practice that it is equally lasting with the other parts of the arrangement, and forms the most effective, simple, and certain cutter which can be applied to the purpose. In conclusion, we may observe that these machines, whether for plain or perforated bricks, tiles, tubes, or other articles to the make of which they are applicable, appears to us a great improvement, not only over the hand-making system, but they have all obtained and maintained a first-class position, for efficiency, simplicity, strength, and economy.

We have also had the opportunity of inspecting numerous testimonials, which have been received by the patentee, and specimens of bricks, from the following parties, who are employing the machines with success:—Mr. Cartwright, of Aynho, Oxfordshire; Messrs. Dickson and McKenzie, Wellington; Lillishall Iron Works; Mr. Rawthorne, Manchester; Mr. Darbishire, Conwy; Mr. Chillingworth, Kidderminster; J. Evelyn Denison, Esq., Ossington. One of the brick machines exhibited was intended for Chas. Lennig, Esq., of Philadelphia—another forcible proof that Mr. Clayton's machines are considered superior to the various inventions of the United States engineers for the purpose. Mr. Christopher Porter, of Geelong, has purchased two machines for the Melbourne and Geelong Railway. The premises occupied by Mr. Clayton, known as the Atlas Works, as an agricultural engineering establishment, is well worthy a visit; for compactness and convenience it cannot be surpassed, and a beautifully-finished stationary steam-engine, by Messrs. Clayton and Shuttleworth, of Lincoln, doing all the work of the lathe-shop, 120 feet long, is alone worthy inspection. The establishment is, upon the whole, as busy as steam and machinery can make it in supplying orders.

RAILWAYS IN INDIA.—The terms offered by the East India Company to the East Indian Railway Company, in connection with the extension share capital, in their main features, are as follows:—A guarantee will be given of 5 per cent. per annum interest on £3,000,000 of extension capital; the railway is to be completed in three years, and a call of £1. per share is to be paid in Feb., the shareholders having also the option of paying up in advance, and of becoming entitled to the guaranteed interest on all such payments. It follows from this arrangement (should it be finally concluded) that instead of 4½ per cent. per annum interest on £3,000,000 of extension capital (inclusive of £1,000,000. extension B capital), the railway company is offered 5 per cent. interest on £3,000,000. extension capital. In like manner, the extension capital of the Madras Railway Company and of the Great Indian Peninsula Railway Company is proposed to be reduced, whilst an increased rate of interest will be guaranteed. Thus the Madras Company's extension capital will probably be cut down from £3,000,000. to £2,000,000., and that of the Great Indian Peninsula Company from £2,000,000. to £1,000,000. The interest guaranteed by the India House being at the same time raised in each case from 4½ to 5 per cent. per annum. The entire guaranteed extension capital of these three companies will, consequently, be reduced from £15,000,000. to £10,000,000. This policy of appropriating a moderate amount of extension capital to each company appears likely to be favourably regarded by capitalists, who were previously somewhat appalled by the prospective calls upon the market. The negotiations, however, are not quite settled.

NETHERLANDS LAND ENCLOSURE COMPANY.—This company was formed in 1852, with the object of enclosing or reclaiming a quantity of valuable land from the sea at the mouth of the Scheldt River, under a concession from the Dutch Government. The original capital of the company was 500,000 fl., in 50,000 shares of 10 fl. each, and 25,000 additional shares were issued, at 10 fl. each, being considered as fully paid up, according to an agreement with the concessionaire, half to himself and half to the directors. On the first operations of the company many difficulties presented themselves, and much loss was sustained, and it became a question with the directors whether the company should be advised to prosecute or wholly abandon the undertaking at once, under the terms of the concession. They carefully examined the terms and bearing of every article, and came to the conclusion that unless a considerable modification of some of them was conceded by the Dutch Government, it would not be desirable to continue operations. A memorial was, accordingly, presented to that body, which was considerably entertained, and such modifications were accorded to, by which much responsibility was taken from the company, particularly in regard to their obligation to maintain the canal after completion being waived. Under these circumstances, the directors proceeded to investigate the position of the share capital, and at the last annual meeting proposed to cancel the 12,500 shares presented to the directors, which had never been distributed, in favour of the company, provided the concessionaire party will accept an ordinary share of 10 fl., fully paid up for every two of such shares. This, with some other detailed arrangements, would reduce the capital entitled to division of profits from 750,000 fl. to 500,000 fl., which would produce the advantages of speed and equal return of capital and profits on each year's operations, and the simplification of accounts. Under these circumstances, the available assets of the company amounted to 387,000 fl., and the liabilities about 100,000 fl., and to meet the latter it was proposed to issue debentures to that amount, the largest creditors having consented to accept such documents, payable at deferred periods, as security. These modifications and recommendations were unanimously sanctioned at a special meeting; and the necessary steps for the reorganisation of the company are now in active operation. With regard to the prospects of the undertaking, from the best information to be obtained from reliable sources, and from the knowledge of the locality possessed by the directors, there is every reason to believe the concession is most valuable, and that the shareholders may reckon with certainty on a very large return of profit, on fully carrying out the enterprise. Messrs. Robert Stephenson and George Parker Bidder, the engineers, have recently proceeded to the Scheldt, and reported on the capabilities of the land, and the prospects of the company. They found 4000 acres, with some outside land, fit to be added to it, almost ready for immediate reclamation. A further quantity of 7500 acres, which may require a little nursing, but will come into profit at no great distance of time; and 28,500 acres of sands above the water and sands recovered by the water, available at further periods, making together 35,000 acres of ground for reclamation. The estimate value of the land at 60 fl. per annum, being 10 fl. less than the usual value, and deducting 10 fl. for cost of reclamation, gives 200,000 fl. for the first 4000 acres, which, from the rich nature of the soil, can be specially realised, when the enclosure has been effected. In three or four years the 7500 acres will be available at a like value; and the enclosure of the remaining 28,500 acres may be spread over a period of from 15 to 20 years. They consider the funds ample for constructing the canal and barrier, and carrying out the objects in a proper manner, and fully capable of fulfilling the expectations entertained of the probable nature of the undertaking.

MINE MATERIALS.—SECOND AND FINAL SALE.
MR. GEO. SEALY WILL SELL, at GEORGIA CONSOLS, in the parish of Toward, on Wednesday, the 20th of December inst., at Ten o'clock in the forenoon, the following valuable MATERIALS:—vis., A 28 in. cylinder PUMPING ENGINE, 9 ft. stroke, with boiler 9 tons; 24 in. cylinder stamping engine, also adapted for winding or crushing, with boiler 8 tons; 3-arm capstan and shears; 140 fms. 7 in. capstan-rope; 3 balance-bobs; 6 and 7 in. wood rods; 70 fms. 2½ by ½ in. flat iron rods; 70 fms. 1½ in. round iron rods; strapping plates; flange 3½ by ½ in. ditto; 5 ditto ditto; 2 1 in. square ditto; 4 ½ in. round ditto; 2 ½ in. ditto; 5 ½ in. ditto; 2 ½ in. ditto; 1 ½ in. square ditto; 2 pieces wide hoop iron; 133 in. smiths' bellows; screwing stock, smiths and miners' tools, lot of old scrap iron, grinding stone and frame, whin cage, &c., new and old timber, 1 crab winch, 2 iron whin kibbles, 2 winze ditto, 2 chains, whin rope, rods, stays, ladders, &c., cistern and launders, drum for drawing machine, frame, saddles and bearings, balance-bob complete, poppet head and shears, main-engine, account-house furniture, &c., at the same time will be SOLD, the REST of the MINE.
For conditions of sale, and further particulars, apply either to the auctioneer, or WILLIAM MILLER, Esq., solicitor, 1, Raymond-buildings, Gray's Inn, London.
Refreshments on the table at Twelve.
Dated Upton, Nov. 28, 1854.

LEZANT, CORNWALL, NEAR GREASTON BRIDGE.
STEAM-ENGINE, MINE MATERIALS, &c., FOR SALE.
MR. DANIEL WARD, WILL SELL, BY PUBLIC AUCTION, on Wednesday, the 20th day of December inst., at One o'clock in the afternoon, the following MINE MATERIALS, at WHEEL SOPHIA, in the parish of Lezant, near Greaston Bridge, Cornwall. A ten horse-power, HIGH PRESSURE ROTARY PUMPING STEAM-ENGINE, with fly wheel, and boiler complete (the above engine is well adapted for agricultural purposes). Inventory of materials:—
18 in. windbore; 18 in. doopce; 18 in. working-piece; 69 in. pumps; 17 in. windbore; 17 in. doopce; 17 in. working-piece; 68 in. pumps; 22 fms. 4 in. horse water lift pumps complete; 8 large cast-iron segments; 2 large level wheels; 1 large iron saddle; 2 cog wheels; 2 cast-iron rails; 1 large iron pulley; 6 small saddles; 2 wheels; 39 cast-iron rod pulleys; 33 ½ in. wrought-iron rods; 12 in. ditto; 5 ½ in. ditto; 5 ditto ditto; 2 1 in. square ditto; 4 ½ in. round ditto; 2 ½ in. ditto; 4 ½ in. ditto; 2 ½ in. ditto; 1 ½ in. square ditto; 2 pieces wide hoop iron; 133 in. smiths' bellows; screwing stock, smiths and miners' tools, lot of old scrap iron, grinding stone and frame, whin cage, &c., new and old timber, 1 crab winch, 2 iron whin kibbles, 2 winze ditto, 2 chains, whin rope, rods, stays, ladders, &c., cistern and launders, drum for drawing machine, frame, saddles and bearings, balance-bob complete, poppet head and shears, main-engine, account-house furniture, &c., at the same time will be SOLD, the REST of the MINE.
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Refreshments on the table at Twelve.
Dated Upton, Nov. 28, 1854.

VALUABLE MINING SHARES FOR PEREMPTORY SALE IN THE BRYNTAIL LEAD MINE.
MR. C. WARTON is directed by the Committee of Management to SELL, BY AUCTION, at the Mart, on Friday next, the 23rd December, at Twelve o'clock (postponed from the 8th inst.), ONE HUNDRED AND SEVENTY-THREE PEREMPTORY SHARES in the BRYNTAIL LEAD MINE, Llanidloes, Montgomeryshire, upon which 87 per share has been paid. The mine is looking extremely well. To be sold free of calls up to the present time.
Particulars may be had at the Mart; of Mr. C. WARTON, 38, Threadneedle-street; and of Mr. NICHOLSON, 57, Old Broad-street, where reports of the mine may be seen.

THE KENMARE MINES, NEAR KENMARE, IN THE COUNTY OF KERRY, IRELAND.

MESSRS. GADSDEN, WINTERFLOOD, AND ELLIS have received instructions to SELL, in One Lot, without reserve, at the Auction Mart, London, on Thursday, the 21st December, at Twelve, the LANDS, comprising about 15 acres, held in fee; the MINING RIGHTS, extending under about 200 acres, held in perpetuity at 1-15th royalty; together with the WHOLE of the MACHINERY, MATERIALS, &c., of the mine, including a 36 in. cylinder STEAM-ENGINE and BOILER, the LIFTS OF PUMPS and PITWORK, the CRUSHER, COBBING MACHINE, STAMPS, CAPSTAN and SHEARS, and all such machinery as is usually provided for the working of mines of great promise. Inventories may be seen, and particulars obtained, by application to the auctioneers, 18, Old Broad-street, London; or to J. R. GWATKIN, Esq., at the offices of the mines, 62, Moorgate-street, London.

TO GOLD MINING, LEAD, AND OTHER COMPANIES.
IN THE EXCHEQUER OF PLEAS.
Between EDWARD TOWSEY (Plaintiff), and Sir CHARLES S. KIRKPATRICK (Defendant).

**TO BE SOLD, BY AUCTION, without reserve, on the premises, at the CWM HEISIAN MINES, in the parish of Llanfachreth, near Dolgelly, in the county of Merioneth, on Wednesday, the 20th day of December inst., at Twelve o'clock at noon, FOUR FULL-SIZED BERDAN'S GOLD ORE PULVERISERS, WASHERS, and AMALGAMATORS, with DRIVING GEAR and PIPES, complete, lately erected, and in good working condition; a PAIR of CRUSHERS, complete, with BUDDLES, WASHING TUBS, TANKS, &c.; a QUANTITY of IRON, TIMBER, WOODEN BUILDINGS, &c. The above mines are situated about seven miles from Dolgelly, and twelve miles from Tanybwlch, to which places there are coaches daily from Llangollen-road and Carnarvon Railway Stations.
Under-sheriff's Office, Bala, Dec. 12, 1854.**

RUNNARD COOMBE MINE, BUCKFASTLEIGH, DEVON.
—SALE OF THE LEASE OF THIS SETT, with the MACHINERY and MATERIALS, in lots, BY PUBLIC AUCTION, without reserve, on Wednesday, the 20th December inst., at Eleven o'clock a.m. punctually.
The auctioneer desires to call the attention of mining agents to this important offering, assuring them that the machinery and materials are in excellent condition, and well worthy attention.—Applications for particulars and conditions of sale to be made to the auctioneer, Mr. W. MAN, Ashburton; or to Wm. MILLER, Esq., solicitor, No. 1, Raymond-buildings, Gray's Inn.

MINING SETT.—TO BE DISPOSED OF, a MINING SETT of considerable size, in a good TIN DISTRICT in Cornwall, in the neighbourhood of Water-powder for driving from 12 to 20 fathoms of stamps, and other property available in the sett itself. Terms of grant very favourable. Price, £50 in cash, or by a good bill at short date. Apply, by letter, to R. W. CHILDS, solicitor, 25, Coleman-street, London.

EAST CROWDALE MINE.—TO BE SOLD, BY PRIVATE CONTRACT, a 36 in. PUMPING ENGINE, with boiler 10 tons, and tube for warmer 30 ft. long; water-wheel, almost new, 30 ft. by 3 ft. breast, cast-iron rings and sockets, with wrought-iron axle, with crusher and drawing machine, complete.

11 ft. 13 in. plunger-pole, with stuffing-box and gland.
19 ft. 12 in. plunger-pole, with stuffing-box and gland.
113 in. H-pieces. 114 in. doopce.
113 in. H-pieces.
79 ft. 15 in. pumps.
21 ft. 13 in. working-barrel.
11 ft. 10 in. working-barrel.
11 ft. 9 in. working-barrel.
18½ ft. 13 in. plunger-case.
15½ ft. 14 in. click doopce.
14 ft. 13 in. click doopce.
15 ft. 14 in. flat-bottom windbore.
16 ft. 13 in. flat-bottom windbore.
29 ft. 13 in. sinking windbore.
16 ft. 13 in. flat-bottom windbore.
39 ft. 8 in. pumps.
49 ft. 7 in. pumps.
7 in. windbore.
13 ft. 8 in. windbore.
19 ft. 6 in. windbore.
14 ft. 7 in. doopce.
13 ft. 7 in. doopce.
13 ft. 7 in. H-piece.
A pair large yokes, for 15 in. lift.
A lot of blaster and gad steel.
Several axes and barrows.
A quantity of timber and ladders, in lots.
Several good shreds.
A quantity of useful iron.
Staples and glands, &c.
A lot of new and old brass.

Application to be made to Mr. EDWARD J. COLE, 2, New Broad-street, London; or Capt. LEAR, Horrabridge, near Tavistock, Devon.

STEAM-ENGINE.—FOR SALE, BY PRIVATE CONTRACT, an excellent 30 inch cylinder BEAM ENGINE, 9 ft. stroke, metal case, bob 8 tons, boiler 8 tons, with fittings and connections, complete, and in perfect condition; has been only three years at work.—May be seen on application to Capt. JAMES CARPENTER, Whitechurch, near Tavistock; and particulars obtained from Mr. EATON, 4, Walbrook-buildings, London.

NATIONAL PROVINCIAL BANK OF ENGLAND.—The directors of the National Provincial Bank of England hereby give notice, that a HALF-YEARLY DIVIDEND, at the rate of EIGHT PER CENT. per annum, will be PAYABLE on the company's stock on an after the 12th of January next, when the dividend warrants will be obtained at the company's office, 112, Bishopsgate-street, or at the different branches. The transfer books will be closed on and after Saturday, the 23d inst., until the dividend becomes payable. By order of the Court of Directors.
DANIEL GIBBERTSON, Agent and Manager.
112, Bishopsgate-street, London, Dec. 12, 1854.

NEW THEORIES OF THE UNIVERSE.—Dr. Bedford, of New Brighton, has published a paper which he prepared for reading before the British Association, but which was declined by the secretary of the Local Committee, Dr. Inman, bearing the above title, and embodying new and peculiar views as to the formation of the heavenly bodies. The author's theory will be best explained by the following extract from the pamphlet:—"I consider that the centrifugal force of the sun, when that body was in a molten liquid state, caused the matter to continue to accumulate at its equator, until, finally, its excess was thrown off, as described; and, as we have seen in the case of Halle's comet, until its centrifugal and transitory forces were balanced, still preserving its excess of equatorial diameter over its polar diameter, which figure I believe, is generally attributed to the cause assigned. The most remote primary planet, I consider, was first projected, when the projectile force of the sun was greatest,—the lighter matter, or that of the least specific gravity, as a rule, being thrown off first, and each in succession inwards to Mercury, which is composed of matter of the greatest density. In like manner as were the primary planets ejected from the equator of the sun, so, I believe, were the satellites projected from the equator of their primaries. And, in reference to the satellites of Saturn, I have the fullest conviction that, hereafter, it will be discovered that one or more of these satellites will be found to have a tertiary, or more properly a quaternary, planet revolving around them. My reason for this supposition is, that the less the specific gravity of the planet, the greater the number of satellites, as a rule. And the matter of which Saturn, rings, and satellites are composed being so exceedingly fluid, when projected from the sun its centrifugal force threw off for a time so continuous a stream of matter, that rings were formed, such as we find (one, or more, of which is discovered to be transparent), in addition to the masses previously projected at intervals, which constitute the moons at Saturn. Again, the earth having a satellite, and its mass when projected, being less fluid than Mars, and yet capable of projecting her moon, I feel confident that such appendages will also be found to Mars; in fact, I should not be surprised if Venus and Mercury completed the uniformity, throughout, our system, of primaries and satellites, although their satellites would be very small."

THE AMERICAN STRAM HARMONICON.—We suggest to the ingenious manufacturers of steam-engines the construction of a magnificent instrument of music, composed of steam-whistles, to be played with keys, the same as an organ. What, for instance, could be more grand and pleasant than the music of a locomotive three or four miles off, coming on steaming you "Hail Columbia." We come with songs to greet you. "Come rest in this bottom, my own stricken harp." &c. &c. What ingenious mechanic will be the first to put this good hint into practice? When patented, we speak for half the proceeds, as a compensation for this suggestion.

KENMARE AND WEST OF IRELAND MINING COMPANY.
—At the SPECIAL GENERAL MEETING of shareholders, held on Wednesday, the 6th December inst.:
The following resolutions were carried unanimously:—
That the resolution passed at the Extraordinary General Meeting of shareholders, held on the 20th November ult., be, and is hereby, confirmed.
That the several contributions advanced by shareholders under resolution of the 6th October be returned to them in full on demand.
J. REYNOLDS GWATKIN, Sec.
62, Moorgate-street, Dec. 13.

UNION TIN MINING COMPANY.—At the THIRTEENTH GENERAL MEETING, held at the offices of the company, 20, Austinfriars, on Thursday, the 15th December, 1854.

Mr. W. CHARLES in the chair.
The secretary read the notice convening the meeting, together with the minutes of the last meeting, which were confirmed.
The secretary presented a statement of the accounts up to September, 1854. The amount of tin returned since the stamping was resumed in September is £510 14s. 2d. amount of tin returned since the stamping was resumed in September is £510 14s. 2d. amount of tin returned since the stamping was resumed in September is £510 14s. 2d.
Resolved,—That the following gentlemen be appointed a committee to examine the financial state of the mine, from the commencement of the working to the present time:—viz., Messrs. J. Lambert, J. Blackett, W. Charles, and Murrough.
Resolved.—A report of the mine from Capt. Webb, dated the 12th December, which was received.
Resolved.—That a vote of thanks be presented to the chairman.
R. C. MANUEL, Sec.

AQUA FRIA GOLD MINING COMPANY.—At the GENERAL MEETING of the shareholders of this company, held at the City of London Tavern, on Friday, the 8th December.

JAMES CLAY, Esq., in the chair.
The following resolutions were carried unanimously:—
Moved by the chairman, and seconded by G. Olive, Esq.:
That the report now read and the statement of accounts submitted to the meeting be approved and adopted.
Moved by S. Barnett, Esq., seconded by C. Satterthwaite, Esq.:
That G. Olive, Esq., be re-elected a director of the company.
Moved by G. P. Dawson, Esq., seconded by C. W. Black, Esq.:
That E. M. Fenwick, Esq., and J. P. Judd, Esq., be re-elected auditors of the company.
Moved by J. Wood, Esq., seconded by R. Kent, Esq.:
That the thanks of the meeting be tendered to the directors for their efficient management of the affairs of the company, and to the chairman for his urbanity and able conduct in the chair.
By order, WILLIAM J. VIAN, Sec.
Offices, 3, Old Broad-street, London.

THE SUE RIVER COPPER AND GENERAL MINING COMPANY OF JAMAICA (Registered).—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the company's offices, 40, Lime-street, in the City of London, on Friday, the 22nd day of December inst., at Twelve o'clock at noon precisely, to confirm the following resolution, passed at an Extraordinary General Meeting of the company, held on the 12th day of December inst., that is to say:—
That the Sue River Copper and General Mining Company of Jamaica be, and the same is hereby, absolutely dissolved; and that the surplus estate and effects of the company be divided among the shareholders, pursuant to the provisions of the Deed.
No person can receive a return without first executing the Deed of Settlement, which lies at the company's offices for execution.
By order of the Directors, GEO. LABALMONDIERE, Sec.
40, Lime-street, City, Dec. 12, 1854.

CORNISH MERCHANTS.
TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Allow me, through the medium of your Journal, to suggest to shareholders of Cornish mines that their simple course in recovering costs from defaulting shareholders would be to appoint a pursuer who, not being a shareholder, may sue any defaulter in any of the law courts for costs incurred, without placing any respectable merchant in the invidious position of becoming a prosecutor (whose safe course is certainly to proceed against those whom he knows can pay); and I would further suggest to shareholders being in arrears for costs, on a demand made on them by a creditor, at the request of the committee or pursuer, that they pay the creditor and apply the amount of their unpaid costs.
A CORNISH MERCHANT.
December, 1854.

WHEEL MESSER, AND CAPTAIN JOHN WILLIAMS.
TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Having seen certain statements in your Journal last week relative to me, as late manager of Wheel Messer, I will thank you to insert the following answers to the accusations contained in the report of the committee against me.
As to there being an extravagant expenditure, and the want of common prudence in not waiting the result of deeper levels before going to the extravagant outlay, I must beg to observe, that before taking the responsibility on myself as to the outlay required in machinery, &c., I consulted our engineer, who, with myself, considered (from the appearance of the mine, and not from that alone, but knowing the engine would have to drain the water by flat-rods from two shafts beside the engine-shaft, and most likely from six other lodges beside the one the engine-shaft was sunk to the work; particularly taking into consideration how we were situated as to our neighbouring mine, inasmuch as, however well we may wish our neighbours, it was but prudent to provide for any mishap which might occur in their mine, being on the same level as our main lodge; and I doubt not but the prudence of our neighbouring agents would have led them to have taken the same precaution, were they similarly situated; hence, in the event of such an occurrence, and our engine found inadequate to keep the whole of the water, we should then be blamed, and deservedly so, for not making our calculations accordingly; and I think the engine now laid fair to last plenty of work, as it is now drawing from three engine-shafts and from three different lodges, with a likelihood of having to drain the water from three more in a very short time.

To the second charge—as to deception and false statements made as to the state of the mine when the large engine went to work—I must leave this to the arbitration of those who are more competent to judge, after I have given my explanation on this head, at the same time disavowing any intention to deceive. First, then, the principals were never led to believe there were any reserves of ore left much above the 30, when the engine was put to work, for they must have known that the ore was laid back in the sinking of the shaft from the 20 to the 30 (as it was the first cut the lodge) was the only ore ground that we were taking our samplings from; and the water was kept at the bottom of the 30, to within a few feet, by a small engine, erected for that purpose. Hence, in their report they acknowledge that they all knew that large quantities of ore (900 tons) had been raised above the 30; in which case, how could there be much reserves left, as the two 30s were only driven a very short distance each way, and it appears they had both altered a little for the worse a day or two before the water drove the men from the bottom? But this I did not know, as the captain reported them to me as being worth about 3 tons to the fathom. Notwithstanding all this, every one who saw the ends and the shaft made sure of discovering a large quantity of ore in sinking to the 40, which was anticipated would be done by the end of May; and, consequently, no one could suppose but that we should materially increase our samplings. To corroborate this, I insert an extract from Capt. Seecombe and Tyack's report of 31st August last year, when those gentlemen, I am convinced, gave a faithful report and opinion of the mine, as it then stood:—

"Michell's shaft has been sunk by the present company from the 10 to the 30; in this 20 fathoms Wheel Messer lodge has considerably improved both in the 20 and 30. The ground already laid open on this lodge in the 20 is all good tribute ground, and the lodges in the ends productive, yielding about 5 tons per fathom each. In the 30 the lodge is laid open about 4 fms. in length, which has yielded upwards of 30 tons of ore; the ends continuing very good, laying open ground that will work at a tribute of 2s. 6d. in 10. Looking at the character of this lodge, so far as laid open, it is my opinion that it will be found more concentrated, and also much more valuable at a greater depth. To facilitate the development of this mine, no time should be lost in erecting a steam-whim, to draw the ores, &c., instead of horses. Also, at the same time, to commence an engine-shaft, with a view of putting on a pumping-engine for drawing water from the south part of the mine, where the lodges present very kindly indications, such as to justify the opinion that they will be found equally productive as those now being worked on. The whole of the work recommended to me as being the best to be done, I have great pleasure in stating that on our going through the mine we have found that strict economy has been observed in bringing the mine to its present productive state."

Now, after all that might fairly have been anticipated, we commenced sinking in the bottom of the 30 on a good lodge of ore, worth from 3 to 4 tons of ore per fathom, but we had not sunk many feet before we came down on a hard cap; so that instead of sinking 5 or 6 fms. per month, we could not sink so many feet. This deceived us all; but we did not endeavour to deceive the committee, for I am certain that they have more of my letters than were agreeable either to them or myself on this head; and on one occasion, if not more, one of them could not forbear saying that he saw a more meagre report than that of one of our captains, when we were in the 30 ground, and which laid along to the 40, and thus retarded our progress at least three months. It appears that the lodge took a change altogether from the 30 to the 40 on leaving the black and grey ore, and is now under the capel in the 40, making yellow ore and mud, which change is rather more favourable than otherwise. Then, I maintain this unlooked for and quite unexpected alteration is sufficient to account for the different position of the mine found in sinking under the 30 to what was expected, without casting such ungenerous and unkind reflections on the manager, who, above all, was the most interested in the welfare of the mine.

Lastly, after all our disappointments as to time and extra outlay, the present appearances and prospects of the mine bid fair to more than realise our first sanguine expectations, as you may infer from the four points named in the committee's report to the shareholders, where I promised, if not brought out in four weeks, I would resign the management into other hands, but foolishly omitted providing against contingencies, which might happen so as to delay the development of these lodges for a few days, which would have made all the difference to me, it being obvious by the reports that one of these, and an important point in holding to the Trevelick lodge, was then expected every hour, and at Williams's every day. So, after all this, anxiety, and perseverance displayed by me to endeavour to realise these objects, which have been by some means retarded a day or two beyond the time named, I must now content myself to transfer these points, so likely to remedy all difficulties, to be brought out under the superintendence of the remaining agents.
Lowertown, near Redruth, I am Sir, your obedient servant,
Dec. 10, 1854. JOHN WILLIAMS.

P.S.—Since writing the above, I have received a letter from our engineer, Mr. T. Loom, as to the propriety of the size of the engine, and from which the following is an extract:—

"I cannot admit that the power of the pumping-engine is too large. At Messer, you contemplate, and are now effecting, the drainage of two distinct sets of lodges; the lodges are champion ones, and when extended upon at a moderate depth will, I have no doubt, give out great quantities of water. Under these circumstances, I would account the possibility of the drainage of the other adjoining mine being ultimately thrown upon this engine, either through the suspension of the mine, or what is most probable, from the more rapid sinking of your shafts. I do not think the engine is at all too large, or larger than a prudent regard for the permanent and efficient drainage of the mine required."

NEWCASTLE AND CARLISLE RAILWAY.—TENDERS
WANTED.—The Directors hereby give notice, that they are ready to receive TENDERS for the SUPPLY of the following articles, during six months ending 30th June, 1855, to be delivered in such quantities as may be required, free of expense, at the Company's Storehouse, Newcastle Station:—Timber (of various kinds), Oak, Elm, and Pine, Malleable Iron, Nails, Cast-iron Wheels, Railway Chairs, Metal Castings, Tubes for Engines, Brass Castings, Brass, Copper, Steel, Tin, Tallow, Grease, Candles, Oil, Turpentine, Oil-stone Covers, Rope, Hemp, Spun Yarn, Oakum, Cotton, Waxes, and other articles, as specified in the printed form of tender, which may be had on application at the office of the company, Central Station, Newcastle-upon-Tyne; and which, when properly filled up, and addressed under cover to the directors, will be received at the said office on or before Saturday, the 23rd December.
N.B. No written tender will be noticed.
Payments will be made for the quantities delivered during each three months by a bill at three months, or in cash, deducting discount, at the option of the directors.
By order, JOHN ADAMSON, Clerk to the Company.
Central Station, Dec. 4, 1854.

EAST INDIAN RAILWAY.—WANTED IMMEDIATELY, for the above line, INSPECTORS OF PERMANENT WAY, BRICKWORK, and WORKS GENERALLY. Pay from £4 to £7 per week, according to qualifications. Apply, stating age, experience, and qualifications, to Mr. RANDEL, No. 8, Great George-street, Westminster.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c.
VIA EGYPT.—THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY, BEING PASSENGERS AND RECEIVE GOODS AND PARCELS FOR THE MEDITERRANEAN, EGYPT, ADEN, BOMBAY, Ceylon, MADRAS, and CALCUTTA, by their mail packets leaving Southampton on the 4th and 20th of every month; and for CHINA and the STRAITS by those of the 4th of every month.
For further particulars, apply at the company's offices, 122, Leadenhall-street, London; and Oriental-place, Southampton.

AUSTRALIA, AMERICA, EAST AND WEST INDIES, &c.
The practical experience obtained during 13 years' colonial, and a long residence in this city, enables the undersigned to OFFER MANY UNUSUAL ADVANTAGES TO SHIPPERS, STOREKEEPERS, SETTLERS, &c. Every facility offered to emigrants. Rates to Melbourne, &c. £15 15s.; New York, £3 3s.; and upwards. Apply to Wm. HARRIS and Co., 25, Philip-street, London.

AUSTRALIA.—TO GOLD MINERS AND OTHERS.—TO BE DISPOSED OF, together or in lots, SEVERAL LARGE and SMALL BASINS, constructed under Mr. Berdan's Patent, with improvements, and provided with gearing. The large basins are new, and complete in every respect. The small basins have been used, and are admirably adapted for all purposes where fine grinding is required, whether for gold amalgamation or otherwise; they could be carried over any road, and are especially available for Australian use. The Berdan Machine is peculiarly economical in the consumption of mercury, the large basins requiring but 15 lbs. for each experiment, whatever the quantity of ore crushed, and the small ones 10 lbs. only. Every information will be given as to condition and terms on application, by letter, to "A. B.," at Mr. Manby's, law stationer, Castle-court, Holborn.

TO SHIPPERS, CONTRACTORS, AND EMIGRANTS.—FOR SALE, PORTABLE STEAM-ENGINES ON WHEELS, complete, for travelling and immediate use, at the MANUFACTURER'S PRICES. Sizes to order, from 6 to 20-horse power, fitted with improved boilers; packed and delivered at the docks ready for shipment, if required. Circular and upright Saw Frames, Hydraulic Presses, &c.
J. ORANGE, Randal Foundry, Nottingham.

IMPORTANT COAL FIELD IN THE WEST RIDING OF YORKSHIRE.—TO BE LET, for a term of years, an important COAL FIELD, in the townships of Alverthorpe and Ossett, within two miles of the town of Wakefield, and in the centre of the populous manufacturing district of the West Riding of Yorkshire, of the extent of about 1800 acres, containing the following well-known and highly valuable BEDS OF COAL, known as the Flockton Thick or Stone Coal, the Flockton Thin or Middleton Forty-yards Coal, and the Middleton Main Coal. Also, about 255 acres of the Gawthorpe coal, and about 340 acres of the Haigh Moor Coal. The coal field has access by means of a broad road with the Lancashire and Yorkshire Railway, and the Calder and Hebble, and the Aire and Calder Navigations.
For particulars, apply to Mr. J. T. WHITE, mining engineer, Wakefield; Messrs. SCHOLEY, MARSDEN, and SKIPWORTH, solicitors, Wakefield.—Dec. 6, 1854.

THE PERMANENT WAY COMPANY have just ISSUED a PAMPHLET, DESCRIPTIVE of various PATENTED INVENTIONS for the PERMANENT WAY OF RAILWAYS, which are adopted and are being applied to more than 3000 miles of line. On application, a copy will be forwarded by post (gratis) to any parties who are interested in the construction of railways.
26, Great George-street, Westminster. WILLIAM HOWDEN, Secy.

STEAM-ENGINES ON SALE.—6, 9, 12, 15, and 20-horse power HIGH-PRESSURE STEAM-ENGINES ON HAND. Also, BLOCKS and SCREW-JACKS of various sizes. Apply to Messrs. BERNETT and THOMSON, Spring Gardens Engine Works, Newcastle-on-Tyne.

SUBSTITUTE FOR HORSES.—NEILSON'S MINERAL LOCO- ENGINES.—The subscribers, at the request of several iron and coal masters, having turned their attention to the substituting of a SIMPLE and CHEAP LOCO-ENGINE, for the horses employed upon their works at so much trouble and expense, have perfectly SUCCEEDED in doing all kinds of horse-work with their little MINERAL LOCO-ENGINES, which are simple in construction, can go upon any part of a railway that a wagon can be put, and are even substituted for the rope and fixed engines upon inclines. There are many of these engines at work in England and Scotland, doing the work of from four to fifteen or twenty horses, at a saving to the proprietors of from £350 to upwards of £1000 per annum.
NEILSON and CO., Locomotive Engine Builders, Glasgow.

CHEMICAL SCHOOL.—THE CHEMICAL SCHOOL OF THE ROYAL PANOPTICON, LEICESTER SQUARE, will RE-OPEN, under the superintendence of Mr. G. F. ANSELL, on Monday, 1st January, 1855. There are Four Annual Sessions, of Ten Weeks each. Hours of Attendance for Morning Pupils, from Ten to One, and from Two to Five; for Evening Pupils, from Eight to Ten daily, except Saturdays and Sundays. Pupils may enter for Half-time—that is to say, Morning Pupils for Three Days of the Week, both Morning and Afternoon, or for Five Days of weekly attendance for the Morning, or for the Afternoon only; Evening Pupils may enter at Half-time Pupils, for Three Days of the Week. The hours being arranged to the convenience of those who have but a portion of their time at disposal. For further particulars, apply at the Laboratory of the Institution. Analyses conducted.

COLLEGE OF INDUSTRIAL SCIENCE, NEVILLE HALL, NEWCASTLE-ON-TYNE.
ASSAY OFFICE and LABORATORY under the DIRECTION of Dr. THOMAS RICHARDSON and Mr. E. J. G. BLOWELL, assisted by Mr. W. CROWDER. The LABORATORIES are OPEN DAILY, from 9 A.M. to 5 P.M., where instruction is given in every branch of Assaying, Analytical Chemistry, and Chemical Research. Fee for Twelve Months, £22 10s.
ANALYSES and ASSAYS of NATURAL and MANUFACTURING PRODUCTS, such as Ores, Slates, Waters, Gases, Metals, Coal, Artificial Manures, Alkalis, &c., are made on moderate terms, and the commercial value estimated when required. INVESTIGATIONS and EXPERIMENTS for IMPROVING MANUFACTURING PROCESSES carried on in conjunction with the proprietors.
A COURSE OF ONE HUNDRED LECTURES on GENERAL CHEMISTRY delivered during the Winter Session at the College of Medicine in connection with the University of Durham, to which the laboratory students have free admission.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT. Conducted by JOHN MITCHELL, F.R.S., Author of Manual of Practical Assaying, Manual of Agricultural Analysis, Treatise on the Adulteration of Food, Metallurgical Papers, &c. ASSAYS and ANALYSES of MINERALS, METALS, and every manufacturing product.
SPECIAL INSTRUCTION IN ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.
All enquiries respecting scale of fees, &c., to be addressed as above.

BRICK MAKING MACHINES.—CLAYTON'S PATENT.
TO CONTRACTORS, BRICK MAKERS, AND EXPORTERS.
TESTIMONIALS.

Sir,—In reply to your enquiries respecting the working and results of your Patent Brick Machine, I beg to say I entirely meet with my approbation, and does more work and better than I expected. I am now making upwards of 14,000 per day, with a set of men that never worked in a brick-field before, or even saw the machine in another week's practice I hope to get 3000 more out of it per day. I have no hesitation in saying it is the best machine extant, and I intend ordering another. Send me one of your Patent Brick Presses, same size mould as before.
Signed, JOHN R. FRITH, Contractor, &c.
To Mr. Henry Clayton, London.

Sir,—We have been working your Patent Brick Machine, with one horse, for the last 13 months at intervals, and have made a large quantity of superior bricks. We are satisfied with the simplicity and strength of it, and have no doubt it is capable of fulfilling all your statements respecting it.
Signed, JAMES BROWN.
Mr. H. Clayton, London.

Sir,—Numerous brick makers and contractors in this neighbourhood having asked our opinion of your Patent Brick Making Machine (with a view of employing the same machinery in their own establishment, if found economical and efficient), and hearing there was one at work so near us, we have much pleasure to inform you and through you many of our friends (of whose value our opinion), that we have this day seen your machine in full operation at the yard of John Frith, Bury, Lancashire, which does its work admirably, producing bricks of a quality most decidedly superior to those made by hand labour; and is now turning out nearly 20,000 per day, with a set of men which we found were almost strangers to a brick-yard, thus further proving the value and simplicity of your invention.
Signed, RICHMOND, CHANDLER, and CO.,
Agricultural Engineers.
To Mr. Henry Clayton, London.

The above MACHINES may be INSPECTED, and Illustrated Catalogues obtained at the MANUFACTORY, ATLAS WORKS, UPPER PARK PLACE, DORSET SQUARE, LONDON.

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1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.	1948.	1949.	1950.	1951.	1952.	1953.	1954.	1955.	1956.	1957.	1958.	1959.	1960.	1961.	1962.	1963.	1964.	1965.	1966.	1967.	1968.	1969.	1970.	1971.	1972.	1973.	1974.	1975.	1976.	1977.	1978.	1979.	1980.	1981.	1982.	1983.	1984.	1985.	1986.	1987.	1988.	1989.	1990.	1991.	1992.	1993.	1994.	1995.	1996.	1997.	1998.	1999.	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.	2025.	2026.	2027.	2028.	2029.	2030.	2031.	2032.	2033.	2034.	2035.	2036.	2037.	2038.	2039.	2040.	2041.	2042.	2043.	2044.	2045.	2046.	2047.	2048.	2049.	2050.	2051.	2052.	2053.	2054.	2055.	2056.	2057.	2058.	2059.	2060.	2061.	2062.	2063.	2064.	2065.	2066.	2067.	2068.	2069.	2070.	2071.	2072.	2073.	2074.	2075.	2076.	2077.	2078.	2079.	2080.	2081.	2082.	2083.	2084.	2085.	2086.	2087.	2088.	2089.	2090.	2091.	2092.	2093.	2094.	2095.	2096.	2097.	2098.	2099.	2100.	2101.	2102.	2103.	2104.	2105.	2106.	2107.	2108.	2109.	2110.	2111.	2112.	2113.	2114.	2115.	2116.	2117.	2118.	2119.	2120.	2121.	2122.	2123.	2124.	2125.	2126.	2127.	2128.	2129.	2130.	2131.	2132.	2133.	2134.	2135.	2136.	2137.	2138.	2139.	2140.	2141.	2142.	2143.	2144.	2145.	2146.	2147.	2148.	2149.	2150.	2151.	2152.	2153.	2154.	2155.	2156.	2157.	2158.	2159.	2160.	2161.	2162.	2163.	2164.	2165.	2166.	2167.	2168.	2169.	2170.	2171.	2172.	2173.	2174.	2175.	2176.	2177.	2178.	2179.	2180.	2181.	2182.	2183.	2184.	2185.	2186.	2187.	2188.	2189.	2190.	2191.	2192.	2193.	2194.	2195.	2196.	2197.	2198.	2199.	2200.	2201.	2202.	2203.	2204.	2205.	2206.	2207.	2208.	2209.	2210.	2211.	2212.	2213.	2214.	2215.	2216.	2217.	2218.	2219.	2220.	2221.	2222.	2223.	2224.	2225.	2226.	2227.	2228.	2229.	2230.	2231.	2232.	2233.	2234.	2235.	2236.	2237.	2238.	2239.	2240.	2241.	2242.	2243.	2244.	2245.	2246.	2247.	2248.	2249.	2250.	2251.	2252.	2253.	2254.	2255.	2256.	2257.	2258.	2259.	2260.	2261.	2262.	2263.	2264.	2265.	2266.	2267.	2268.	2269.	2270.	2271.	2272.	2273.	2274.	2275.	2276.	2277.	2278.	2279.	2280.	2281.	2282.	2283.	2284.	2285.	2286.	2287.	2288.	2289.	2290.	2291.	2292.	2293.	2294.	2295.	2296.	2297.	2298.	2299.	2300.	2301.	2302.	2303.	2304.	2305.	2306.	2307.	2308.	2309.	2310.	2311.	2312.	2313.	2314.	2315.	2316.	2317.	2318.	2319.	2320.	2321.	2322.	2323.	2324.	2325.	2326.	2327.	2328.	2329.	2330.	2331.	2332.	2333.	2334.	2335.	2336.	2337.	2338.	2339.	2340.	2341.	2342.	2343.	2344.	2345.	2346.	2347.	2348.	2349.	2350.	2351.	2352.	2353.	2354.	2355.	2356.	2357.	2358.	2359.	2360.	2361.	2362.	2363.	2364.	2365.	2366.	2367.	2368.	2369.	2370.	2371.	2372.	2373.	2374.	2375.	2376.	2377.	2378.	2379.	2380.	2381.	2382.	2383.	2384.	2385.	2386.	2387.	2388.	2389.	2390.	2391.	2392.	2393.	2394.	2395.	2396.	2397.	2398.	2399.	2400.	2401.	2402.	2403.	2404.	2405.	2406.	2407.	2408.	2409.	2410.	2411.	2412.	2413.	2414.	2415.	2416.	2417.	2418.	2419.	2420.	2421.	2422.	2423.	2424.	2425.	2426.	2427.	2428.	2429.	2430.	2431.	2432.	2433.	2434.	2435.	2436.	2437.	2438.	2439.	2440.	2441.	2442.	2443.	2444.	2445.	2446.	2447.	2448.	2449.	2450.	2451.	2452.	2453.	2454.	2455.	2456.	2457.	2458.	2459.	2460.	2461.	2462.	2463.	2464.	2465.	2466.	2467.	2468.	2469.	2470.	2471.	2472.	2473.	2474.	2475.	2476.	2477.	2478.	2479.	2480.	2481.	2482.	2483.	2484.	2485.	2486.	2487.	2488.	2489.	2490.	2491.	2492.	2493.	2494.	2495.	2496.	2497.	2498.	2499.	2500.																																																																											
1035	Craiglock Moor (cop.), St. Cleare	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

MINES NOT HAVING SOLD OR

[illegible]

Transactions on the Stock Exchange

Shares.	Paid.	Clas.	Pr.	Bus.	Done.	Shares.	Paid.	Clas.	Pr.	Bus.	Done.
100000 Agua Fria	1	...	...	...	...	72000 Grand Duchy of Baden	1	...	...	...	...
30000 Anglo-Australian Gold	1	...	...	...	...	60000 Liberty	1	...	...	...	...
100000 Anglo-Californian	1	...	...	...	...	120000 Marquis (of Portugal) ..	1	...	1 1/2	...	...
20000 Australian	6	...	...	...	...	100000 Maximilian (of Mexico) ..	1	...	...	...	...
50000 Australian Cordillera	1	...	...	...	...	20000 Mexican Southern Amer. ..	9	...	...	...	...
100000 Australian Freehold	1	...	...	...	...	60000 New Granada	1	...	...	...	...
50000 Ave Maria	1	...	...	...	...	200000 Nuevacon Monks	1	...	...	...	...
210000 Carsons Creek	1	...	...	...	...	10000 Pontefract Silver-lead ..	30	...	...	...	...
100000 Colomine Gold	1	...	...	...	...	100000 Port Phillip	1	...	...	...	...
350000 Copper Miners of England ..	1	...	...	...	...	60000 Quanta Rock	1	...	...	...	...
5000 Ditto, Pref. 7 1/2 per cent. ..	25	...	...	...	...	50000 South Australian	1	...	...	...	...
70000 English and Australian Cop. ..	6	70000 Waiwar	1
25000 Fortuna	1	100000 West Manilla	1

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